

## COMMUNITY HEALTH NEEDS ASSESSMENT – 2014 –



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### **ACKNOWLEDGEMENTS**

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The Raritan Bay Medical Center's Community Health Needs Assessment and Implementation Plan were approved by the Board of Trustees. Questions regarding the Community Health Needs Assessment should be directed to Raritan Bay Medical Center's Marketing & Business Development Office at 732-924-5098.

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<sup>(1)</sup> The CHNA's development consultants, New Solutions, Inc., have planned and conducted numerous community needs assessments and implementation plans with multiple organizations including individual hospitals, health systems, other health care and community organizations such as consortia comprised of a wide range of participant organizations. The NSI team, of which three are Ph.D. prepared, includes: planning consultants, market researchers, epidemiologists, computer programmers and data analysts. NSI has extensive regional and local community knowledge of health issues, community services and provider resources for the community reviewed by this assessment. This expertise, as well as the methodological and technical skills of the entire staff, was brought to bear in conducting this Needs Assessment and Health Improvement Plan

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### **EXECUTIVE SUMMARY**

### **BACKGROUND**

The Community Health Needs Assessment (CHNA) for the communities served by Raritan Bay Medical Center (RBMC) was designed to ensure that the Medical Center continues to effectively and efficiently serve the health needs of the area. RBMC is made up of two hospital divisions, one located in Perth Amboy, the other operating in Old Bridge. Each division has its own Primary Service Area (PSA) as well as a service area common to both hospitals (PSA). The CHNA was developed in accordance with all federal rules and statutes, specifically, PL 111-148 (the Affordable Care Act) which added Section 501<sup>(r)</sup> to the Internal Revenue Code.

A Community Benefit Task Force was convened to oversee the development of the CHNA. The Committee is made up of key stakeholders in the county (government, civic, community-based organizations, faith-based organizations and health care providers) who are focused on improving the health of community residents. The findings and recommendations of the Community Benefit Task Force informed the CHNA process and ultimately RBMC's selection of five community health need focus areas that are based on RBMC's capacity, resources, competencies, and needs specific to the population it serves.

The CHNA uses detailed secondary public health data at the County and community levels to identify health assets, gaps, disparities and trends. The data included hospital- and community-specific billing data, a community survey, and local public health data. These data were supplemented by meetings and discussions with the Community Benefit Task Force which provided additional insight and expertise and led to the identification of Plan priorities.

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**RBMC Service Area Map** 

The communities considered throughout this CHNA are pictured on the previous page, and are all located within Middlesex County. According to U.S. Census Bureau, Middlesex County is the second most populous county in New Jersey. Between 2000 and 2012, Middlesex County's population increased by 4.5%. Much of the growth occurred in Monroe, which experienced a 33% population increase, Old Bridge 10.6%, and Perth Amboy 7.6%; all within RBMC's combined service areas. Middlesex County's 25 municipalities are widely diverse, encompassing a mix of small towns, urban centers and rural communities.

Middlesex County's economic wealth is not distributed uniformly across all residents. The area served by RBMC contains urban areas that include a large number of poor and minority populations. The following is an example of the economic and social differences and disparities identified in this CHNA:

- Middlesex County's median household income in 2012 was \$79,442, more than \$7,500 above
  the statewide median. In Perth Amboy in 2012, the median household income was \$45,104,
  \$34,000 below the median income of county residents. Perth Amboy, the Primary Service Areas
  (PSAs) of both Hospital Divisions and the towns of Perth Amboy and Old Bridge all have median
  income levels below that of the County.
  - o In 2012, 5.4% of Middlesex County families were living below the poverty level.
  - In Perth Amboy and Carteret the percent of families living below poverty were triple and double that of the County, respectively.
- In 2014, 6.6% of Middlesex County residents were unemployed. The unemployment rate for Perth Amboy was double this rate (13.2%).
- Between 2010 and 2014, New Jersey, Middlesex County, Edison, Old Bridge and Woodbridge experienced at least a 25% decrease in unemployment. During the same timeframe, Perth Amboy only demonstrated a 16% decline in unemployment.
- In 2012, Perth Amboy (31.1%) had nearly three times the percent of residents with less than a high school diploma than New Jersey.
  - The differences noted between the percent of high school graduates in the service areas of the RBMC-Perth Amboy Division (RBMC-PA) and the RBMC-Old Bridge Division (RBMC-OB) are also divergent; 14.8% in the RBMC-PA area compared to 8.1% in the RBMC-OB area.
  - o In 2014, 5.4% of Middlesex County residents had not completed the 9<sup>th</sup> grade compared to 5.5% in New Jersey, and 17.9% in Perth Amboy.
- In 2012, according to the U.S. Census Bureau, 16.4% of Middlesex County residents over 5 reported speaking English "less than very well" compared to 12.4% of New Jersey residents.
  - Middlesex County experienced a 22% increase in the population that reported limited English proficiency.
- In 2012, Whites made up 59.2% of New Jersey's population, 49.0% of Middlesex County's population, 70.1% of Old Bridge's population, and 13.9% of Perth Amboy's population.
- Blacks represented 12.8% of the population of New Jersey, 9% of Middlesex County, 6.6% of Perth Amboy, and 5.3% of Old Bridge.
- Hispanics were 17.7% of the population of the State, 18.6% of the population of Middlesex County, 76.7% of Perth Amboy's population, and 9.7% of Old Bridge's population.

 Asians, alone, were 8.3% of the State's population, but constitute 21.6% of Middlesex County's population. Asians were only 1.3% of Perth Amboy's population, and 13.7% of the Old Bridge population.

Disparities in Middlesex County and RBMC's Primary Service Area (PSA) residents' incidence and prevalence of illness identified by this CHNA include:

- Heart Disease is the leading cause of death in the County. Whites had the highest mortality rate for heart disease in the County at 193/100,000 compared to 158.7/100,000 for Blacks.
  - Despite an 18.5% decrease in the age-adjusted mortality rate for heart disease, the rate remains considerably higher than the *Healthy People 2020* target of 108.8.
  - According to the 2010 BRFSS Study, 4.4% of Middlesex County residents report being told they had angina or coronary heart disease. This places the County among the poorest performing quartiles in the State.
- In terms of disease burden as measured by hospital utilization rates, residents of Perth Amboy
  had the higher rates of hypertension and high cholesterol compared to residents of Middlesex
  County. Residents of RBMC-OB service area and residents of Perth Amboy had the highest rates
  of hospital utilization for heart attacks.
- Residents of Old Bridge and the RBMC-OB service area had the highest rates of hospitalization with a diagnosis or comorbidity of CHF.
- Cancer is the second leading cause of death in the County. Age-adjusted rates vary by race. In 2009, deaths due to cancer in New Jersey and in Middlesex County were highest among Blacks.
  - o Black, Non-Hispanic = 215.9/100,000
  - o White, Non-Hispanic = 183.7/100,000
  - o Hispanic = 123.1/100,000
- In 2012, the RBMC-OB service area had the highest hospital use rate for cancer discharges when compared to Middlesex County and other select regions in the service area.
- Disparities are also present among maternal and child health indicators.
  - o In 2010, there were 51.9% more Black low birth weight babies in Middlesex County (11.7%) than Whites (7.7%).
  - o In 2010, the disparity between Middlesex County Black and White very low birth weight babies was 4.1% compared to 1.1%.
  - o In 2012, the County's teen birth rate/1,000 population was 13.8. The rate in Perth Amboy was 23.5/1,000.
- In the 2010 BRFSS Study, 9.7% of Middlesex County residents reported ever being told they had diabetes. This was higher than the State rate (9.2%) and U.S. rate (8.7%). In order to examine the disease burden of diabetes patients at the local level, we examined patients' use of hospital services (inpatient, ED and SDS).
  - Between 2009 and 2012, the hospital use rate among diabetics increased in the County, the RBMC-PA, RBMC-OB, combined RBMC service areas, and in Old Bridge and Perth Amboy.
  - The highest rate occurred in Perth Amboy (96.3/1,000).
  - Perth Amboy had the largest increase; 78.4/1,000 (2009) to 96.3/1,000 (2012).

- Middlesex County ranked among the best performing quartiles of New Jersey counties with regard to asthma prevalence according to the BRFSS Study.
  - o Between 2009 and 2012, the Middlesex County hospital use rate for asthma stayed fairly constant (25.3/1,000 to 25.6/1,000).
  - o The rate in Perth Amboy rose during this same timeframe from 65.5/1,000 to 73.3/1,000.
  - o The rate in Perth Amboy was more than twice as high as the hospital use rate in the combined RBMC service areas and nearly three times as high as the County rate.
- Between 2006 and 2011, the percent of Middlesex County residents with a BMI over 30 decreased slightly to 21.4% and was lower than the County Health Ranking benchmark.
  - The hospital use rate for Middlesex County residents who are obese rose from 8.1/1,000 to 9.7/1,000.
  - o In the RBMC combined service areas the rate rose from 11.1/1,000 to 12.6/1,000 residents.
  - Nutrition/Obesity ranks as the number one health problem in the community according to the Community Health Survey undertaken for the CHNA.
- 2012 ED Use Rates in the RBMC-PA service area are higher (352.4) than the County (285.2) and State (343.4).
  - RBMC-OB service area ranked lowest at 251.9/1,000.
  - There are several zip codes in the RBMC-PA service area with exceptionally high use rates:
    - Perth Amboy = 592.5/1,000
    - ♦ Carteret = 359.6/1,000
    - ♦ South River = 344.2/1,000
- 2012 Inpatient Use Rate in the combined RBMC service areas (164.3/1,000) exceeds the Inpatient Use Rate in the County (144.0/1,000) and State (158.3/1,000).
  - Several zip codes in the combined service areas demonstrate especially high inpatient utilization.
    - ♦ Monroe = 215.1
    - ♦ Matawan = 192.2
    - ◆ Spotswood = 188.2
    - ♦ Perth Amboy = 183.3
    - ♦ South Amboy 181.1
- In 2012, Middlesex County (2.3/1,000) had 56% fewer hospital admissions for mental health conditions (5.2/1,000) than the State.
  - o Deaths due to suicide in Middlesex County rose from 4.4/100,000 to 7.3/100,000 in 2009; an increase of 39.7%.
  - The use rate for mental health admissions for Perth Amboy in 2012 was nearly double the County rate, and only slightly lower than the State.
  - The ED use rate for mental health in RBMC-PA service area (8.9/1,000) is higher than the County (7.3/1,000) but lower than the statewide rate (10.3/1,000).
  - o Perth Amboy use rate (15.4/1,000) is more than double the County rate and exceeds that of statewide rates by 5 points.

Healthy Community Health Indicators identify that:

- The violent crime rate in Middlesex County (186/100,000) is three times higher than the National benchmark of 64/100,000.
- 4% of low income households do not live near a grocery store compared to the Community Health Rankings benchmark of 1%.
- 55% of all restaurants in Middlesex County are fast food restaurants, more than twice the National benchmark of 27%.
- Middlesex County residents report a higher number of physically unhealthy days per month; 3.0 compared to a National benchmark of 2.6.
- Survey respondents ranked access to health care and other services, low crime rate, and good quality schools as the three most important issues to define a healthy community.
- Among respondents to the Community Health Survey, nutrition/obesity, substance abuse, and chronic diseases were identified as the top three health problems in the community.
- Among all survey respondents, 64% indicate their community was a healthy place to live.
  - o This differed by service area with RBMC-PA residents at 53% and RBMC-OB at 71%.
- The three most important safety issues identified by survey respondents were unsafe driving, alcohol and substance abuse, and smoking.
- 11% of combined service area residents are dissatisfied with their housing situation. The primary reasons being high cost, and too small or crowded.

### **TOP FIVE HEALTH ISSUES**

Five health issues emerged as those most likely to benefit residents of the areas served by the Medical Center and to be within its purview, competency and resources of RBMC to impact in a meaningful manner. These include:

- 1) Healthy Nutrition/Obesity
- 2) Mental Health and Substance Abuse
- 3) Diabetes
- 4) Heart Disease and Other Cardiovascular Diseases
- 5) Cancer

### 1. Healthy Nutrition/Obesity

Healthy nutrition is all about learning to eat healthy by adding more fresh fruits, vegetables and whole grains, and cutting back on foods with fat, sugar and salt. Healthy eating ensures you get the right balance of vitamins, minerals and other nutrients.

Healthy eating is one of the best ways to prevent and control many health problems including:

- Heart Disease
- High Blood Pressure
- Type 2 Diabetes
- Some types of Cancer
- Obesity

A healthy eating plan contains variety and controls portion size while emphasizing vegetables, fruits, fatfree or low-fat dairy products.

- A healthy eating plan includes lean meats, poultry, fish, beans, eggs and nuts.
- A healthy eating plan limits saturated and trans fats, sodium and sugar.

A great deal of research is underway on the subject of healthy nutrition and obesity prevention because of the increasing rates of obesity in the U.S. and the impact of obesity on other chronic diseases.

Between 1980 and 2000, obesity rates doubled among children and adults and tripled among adolescents. (<a href="www.cdc.gov/pdf/facts">www.cdc.gov/pdf/facts</a> about obesity in the united states.pdf</a>) Obesity is a major risk factor for Type 2 Diabetes. This form of diabetes which was once believed to affect only adults is now being diagnosed in children. Overweight children with diabetes are at risk for serious complications of the disease which include kidney disease, blindness and amputations.

Overweight and obesity are associated with increased risks for many types of cancer, including cancer of the breast, colon, endometrial, esophagus, kidney, pancreas, gall bladder, thyroid, ovary, cervix and prostate, as well as multiple myeloma and Hodgkin's lymphoma. (www.cdc.gov/healthyyouth/obesity/facts.htm)

Although healthy lifestyle habits like healthy eating and physical activity can lower the risk of obesity and diabetes, too few adults or children eat the recommended five or more servings of fruits or vegetables a day or get the recommended amount of physical activity to provide health benefits.

Healthy lifestyle activities are influenced by a number of sectors of society – families, communities, schools, medical providers, faith-based organizations, the media, food and beverage industries, and entertain industries. Schools play a particularly critical role by offering safe environments for physical activities and policies that support healthy lifestyle choices. The following points highlight how the issues of disease incidence and risk factors play out in communities served by RBMC.

- Between 2009 and 2012, discharges with obesity as a cause or comorbidity increased from 11.1% to 12.4% in the combined RBMC service areas.
  - o This is almost 4 percentage points higher than the County rate of 9.7%.
- 27% of Middlesex County residents report no leisure time physical activity compared to a National benchmark of 21%.
- Nutrition and Obesity rank as the number one health problem in the community, according to the Community Health Survey.

### 2. Mental Health and Substance Abuse

Mental health disorders are medical conditions that disrupt a person's thinking, mood, feelings, ability to relate to others, and daily functioning. These conditions reduce one's ability to cope with daily routines such as working, going to school, or raising a family. Mental health disorders include illnesses such as major depression, bipolar disorder, and post-traumatic stress disorder.

While the causes for mental disorders are unknown, there are certain factors that can increase an individual's risk of developing a mental disorder including family history, stressful life conditions, having

a chronic disease, traumatic experience, use of illegal drugs, childhood abuse and neglect, or lack of social support. Mental disorders are treatable illnesses and most people with this condition can get their symptoms controlled with a treatment plan developed by a trained psychologist or psychiatrist.

Mental illness affects children, adults and seniors. A recent report from the CDC reports 1 in 5 children in the U.S. suffer from a mental disorder. (<a href="www.cdc.gov/media/releases/2013/a0516-child-mental-health.html">www.cdc.gov/media/releases/2013/a0516-child-mental-health.html</a>) These conditions affect boys and girls of all ages, regions, ethnic backgrounds, and races. Approximately, \$247 billion is spent on children's mental health each year. (<a href="www.cdc.gov/media/releases/2013/a0516-child-mental-health.html">www.cdc.gov/media/releases/2013/a0516-child-mental-health.html</a>)

The number of visits to physicians' offices, hospital outpatient and emergency departments with a primary diagnosis of mental disorder number 63.3 million a year; 1.5 million receive a principal diagnosis of psychosis and are admitted to a hospital; and nearly 1 million nursing home residents suffer from a mental disorder, or 66.7% of all nursing home residents. (www.cdc.gov/nchs/fastfacts/mental.html)

- The average number of mentally unhealthy days per month reported by Middlesex County residents (3.0) was higher than the National benchmark (2.4).
- Deaths due to suicide increased 42% between 2004 and 2009 from 5/100,000 to 7.3/100,000.
- Hospital use rates for mental health discharges in the RBMC-PA and RBMC-OB service areas was higher than the County.
- The ED visit rate for mental health cases in Perth Amboy was 5 points higher than the rate statewide.
- 16% of survey respondents in the Combined Service Area indicated they or someone in their family utilized mental health services in the past year.

Substance abuse can be defined as a pattern of harmful use of any substance for mood altering purposes. These substances may include inhalants and solvents, illegal drugs, alcohol, and prescription drugs.

There are approximately 80,000 deaths attributable to excess alcohol abuse each year in the U.S. This makes excessive alcohol abuse the third leading cause of lifestyle-related death. In 2006, there were more than 1.2 million ED visits and 2.7 million physician office visits due to alcoholism. The economic costs were estimated at \$223.5 billion. (http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm)

According to the latest government statistics (2010) 8.9% of persons age 12 and over are involved in the use of illegal drugs or the non-medical use of prescription drugs. (<a href="www.cdc.gov/alcohol/factsheets/alcohol-use/htm">www.cdc.gov/alcohol/factsheets/alcohol/factsheets/alcohol-use/htm</a>) The most commonly used drugs of those over the age of 12 include marijuana, 6.9%, (<a href="www.cdc.gov/alcohol/factsheets/alcohol-use/htm">www.cdc.gov/alcohol/factsheets/alcohol-use/htm</a>) cocaine, 2.4 million users, hallucinogens, including ecstasy, 1 million users, methamphetamine, 730,000, and prescription drugs, 7 million users. (<a href="http://alcoholism.about.com/od/drugs/a/nsduh\_drugs.htm">http://alcoholism.about.com/od/drugs/a/nsduh\_drugs.htm</a>)

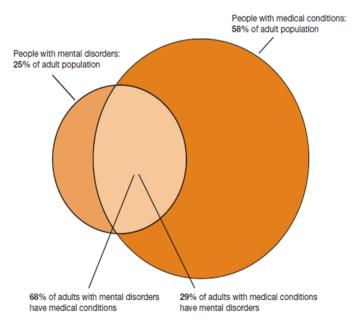
In 2008, 1.8 million people were admitted to addiction facilities that report to State data systems, 41.4% of the treatment admissions were for alcohol abuse, 20% for heroin and other opiates, and 17% for marijuana abuse. (http://alcoholism.about.com/od/drugs/a/nsduh drugs.htm)

• Between 2008 and 2012, Middlesex County experienced a 79% increase in the rate of substance abuse admissions from 344.1/100,000 to 615.8/100,000.

- The ED visit rates for substance abuse in the RBMC-PA service area (6.9/1,000) exceeds the County (5.2/1,000) and State (6.7/1,000) rate.
- o The rate of ED visits for substance abuse among Perth Amboy residents (12.5) is more than double the County rate and close to double the statewide rate.
- Survey respondents identified substance abuse as the second most important health problem in the Combined Service Area.

Of increasing concern from a population health perspective is the co-morbidity between mental disorders and medical conditions.

In the 2003 National Comorbidity Survey Replication (NCS-R), more than 68% of adults with a mental disorder had at least one medical condition, and 29% of those with a medical disorder had a comorbid mental health condition. (<a href="http://www.rwjf.org/content/dam/farm/reports/issue\_briefs/2011/rwjf69438">http://www.rwjf.org/content/dam/farm/reports/issue\_briefs/2011/rwjf69438</a>)



Adapted from the National Comorbidity Survey Replication 2001-2003

When mental and medical conditions cooccur, the combination is associated with elevated symptom burden, functional impairment, decreased length and quality of life, and increased costs. (http://www.rwjf.org/content/dam/ farm/reports/issue briefs/2011/ rwjf69438)

The pathways causing comorbidity of mental and medical disorders are complex and bidirectional. Medical disorders may lead to mental ones, mental conditions may place a person at risk for medical disorders, and mental and medical disorders may share common risk factors. Models that integrate care to treat people with

mental health and medical comorbidities have proven effective. Despite their effectiveness, these models are not in widespread use. (<a href="http://www.rwjf.org/content/dam/farm/reports/issue\_briefs/2011/rwjf69438">http://www.rwjf.org/content/dam/farm/reports/issue\_briefs/2011/rwjf69438</a>)

An important driver of the high rate of comorbidity is the high prevalence of both mental disorders and chronic conditions. Approximately 25 percent of American adults suffer from a diagnosable mental disorder in any given year and close to half of the adult population have one or more chronic medical conditions. Having a mental health disorder is a risk factor for developing a chronic condition and vice versa. In the National Health Interview Survey, the likelihood of depression increased with each additional comorbid chronic medical disorder. Similarly, people with schizophrenia and bipolar disorder are up to three times more likely to have three or more chronic conditions compared with people

without these mental disorders. (<a href="http://www.rwjf.org/content/dam/farm/reports/issue-briefs/2011/rwjf69438">http://www.rwjf.org/content/dam/farm/reports/issue-briefs/2011/rwjf69438</a>)

Many of the most common treatments for diseases may actually worsen the comorbid condition. Many psychotropic medications can cause weight gain, a risk factor for Type 2 Diabetes. At the same time, many treatments for common medical conditions have psychological side effects that may exacerbate or complicate underlying psychiatric conditions. (<a href="http://www.rwjf.org/content/dam/farm/reports/">http://www.rwjf.org/content/dam/farm/reports/</a> issue\_briefs/2011/ rwjf69438)

When mental and medical conditions co-occur, the combination is associated with elevated symptom burden, functional impairment, decreased length and quality of life, and increased costs. The impact of having comorbid conditions is at least additive and at times may be synergistic, with the cumulative burden greater than the sum of the burden of individual conditions. Comorbid mental and medical conditions are associated with substantial costs. Mental disorders are associated with roughly a twofold-to-fourfold elevated risk of premature mortality. From a population perspective, the bulk of these deaths are due to "natural" causes such as cardiovascular disease rather than accidents and suicides. (http://www.rwjf.org/content/dam/farm/reports/ issue briefs/2011/ rwjf69438)

### 3. Diabetes

Diabetes mellitus refers to a group of metabolic diseases in which a person has high blood sugar, either because the pancreas does not produce enough insulin or because cells do not respond to the insulin that is produced.

Normally, blood glucose levels are tightly controlled by insulin, a hormone produced by the pancreas. Insulin lowers the blood glucose level. When blood glucose elevates (e.g. after eating) insulin is released from the pancreas to normalize the glucose level. In diabetic patients the absence or insufficient production of insulin causes hyperglycemia. Diabetes is a chronic life-long condition which can be controlled.

Over time, diabetes can lead to blindness, kidney failure, and nerve damage as a result of damage to small vessels. Diabetes is also a factor in accelerating the hardening and narrowing of blood arteries (atherosclerosis) leading to strokes, coronary heart disease, and other large vessel disease.

Diabetes affects approximately 26 million people in the U.S., and another 79 million with pre-diabetes. In addition, another 7 million U.S. residents have diabetes and do not know it. (<a href="http://www.medicinenet.com/diabetes">http://www.medicinenet.com/diabetes</a> mellitus/page 2.htm)

- Diabetes was the eighth leading cause of death in Middlesex County in 2009.
- Diabetes prevalence in Middlesex County ranks the County in the worst performing quartile in the State.
- The hospital utilization rate for Perth Amboy residents with diabetes (96.3/1,000) was more than double the rate for Middlesex County residents (46.9/1,000).
- The hospital utilization rate for residents with obesity, which is a risk factor for diabetes, rose between 2009 and 2012 in the combined RBMC service areas (11.5/1,000 to 13.3/1,000) and exceeds the county-wide rate (9.7/1,000).

- Obesity and Healthy Nutrition were the top ranked health problem by respondents to the Community Health Survey.
- A diagnosis of diabetes was reported by 17.3% of survey respondents of the Combined Service Area.

In 2011, the total annual cost of diabetes was estimated at \$174 billion in the U.S. This included \$116 billion in direct healthcare cost and another \$58 million due to costs related to disability, premature death, or work loss. Medical expenses for people with diabetes are more than double the cost experienced by people without diabetes. (http://www.medicinenet.com/diabetes\_mellitus/page 2.htm)

### 4. <u>Heart Disease and Other Cardiovascular Diseases</u>

More than 787,000 U.S. residents died from heart disease, stroke and other cardiovascular diseases in 2010. That is about one in every three deaths in the U.S. annually. Approximately, 84 million people in this country suffer from some form of cardiovascular disease. In fact, cardiovascular disease is the country's leading health problem. (American Heart Association, December 13, 2013.)

Heart disease refers to a constellation of heart conditions including coronary artery disease, heart attack, cardiac arrest, congestive heart failure, and congenital heart diseases. Heart disease is the leading cause of death for both men and women, and most ethnicities. Approximately 1 in every 4 deaths in the U.S. is due to heart disease. (www.cdc.gov/heartdisease/facts.htm)

Coronary heart disease is the most common type of heart disease killing more than 385,000 people annually. (<a href="www.cdc.gov/heartdisease/facts.htm">www.cdc.gov/heartdisease/facts.htm</a>) This condition alone costs the U.S. \$108.9 billion annually for healthcare services, medications and lost productivity.

Stroke is the fourth leading cause of death in the U.S., killing more than 129,000 people a year, or one very four minutes. Stroke is a leading cause of serious long-term disability that accounts for more than half of all patients hospitalized for neurological conditions. Someone in the U.S. has a stroke every 40 seconds. (American Heart Association, December 13, 2013.)

Some risk factors for heart disease such as age, family history of early heart disease, male gender or post-menopausal women, and race cannot be changed. Other risk factors are associated with lifestyle choices and can be changed.

Physical inactivity is a modifiable risk factor for heart disease and one that can impact other risk factors including obesity, high blood pressure, high triglycerides, low levels of HDL cholesterol, and diabetes. Regular physical activity can improve risk factor levels. High blood pressure usually has no symptoms and not only damages the heart, but the kidneys and brain as well. Overweight and obesity, or excess body fat, is often linked to LDL cholesterol and triglyceride levels, high blood pressure and diabetes. Diabetes increases the risk for heart disease. Nearly three-fourths of diabetics die from some form of heart vessel disease.

Excessive alcohol use leads to increased blood pressure, and increases the risk for heart disease. It also increases blood levels of triglycerides which contribute to atherosclerosis. Other lifestyle choices like

cigarette smoking increase the risk of developing heart disease and heart attack by 2 to 4 times. Cigarette smoking promotes atherosclerosis, and increases the levels of blood clotting factors. Nicotine raises blood pressure and carbon monoxide reduces the amount of oxygen the blood can carry to the lungs. Second hand smoke can increase the risk of heart disease to non-smokers, as well. (<a href="https://www.cdc.gov/heartdisease/behavior.htm">www.cdc.gov/heartdisease/behavior.htm</a>)

Dietary choices can also increase one's risk for heart disease and obesity. Diets high in saturated fats and cholesterol raise blood cholesterol levels and promote atherosclerosis. High salt content in diets can raise blood pressure levels.

The impact of heart disease on the populations served by RBMC as well as the incidence of lifestyle behaviors is seen in the following ways:

- In 2009, the age-adjusted rate of heart disease per 100,000 population exceeded the *Healthy People 2020* target by 63%.
- 5% of survey respondents from the Combined Service Area reported a heart attack.
- In 2010, 4.4% of Middlesex County residents reported angina or coronary heart disease compared to 3.9% statewide.
- 5% of the survey respondents in the Combined Service Area reported angina or coronary heart disease.
- The percentage of people reporting high cholesterol in Middlesex County is nearly three times higher than the *Healthy People 2020* target.
- The percentage of smokers in Middlesex County is higher than the *Healthy People 2020* target.
- Excessive drinking among Middlesex County residents (20%) is double the CHR benchmark (10%).
- Congestive heart disease ranked #1 for all ACSC for which Middlesex County residents were hospitalized.
- A higher rate of service area residents with a diagnosis or comorbidity of heart attack, stroke, heart failure, hypertension and/or high cholesterol used a hospital service than residents county-wide.
- 36.5% of survey respondents in the Combined Service Area reported high blood pressure.

### 5. Cancer

Cancer is the second leading cause of death in the U.S. Cancer is a class of diseases characterized by out of control abnormal cell growth. There are over 100 different types of cancers. Cancer cells can spread to other parts of the body through the blood and lymph systems.

Cells can experience abnormal growth if there are damages to DNA, and, therefore, damage to the genes involved in cell division. Cancer can result from a genetic predisposition that is inherited from family members. Thus, it is possible to be born with a gene mutation which can make one more likely to develop cancer.

As people age there is an increase in the number of possible cancer causing mutations that can occur in our DNA. This makes age a primary risk factor for cancer. Several viruses such as HPV, Hepatitis B and C, Epstein-Barr and HIV, and anything that weakens the immune system's ability to fight infections are

also risk factors. Other factors known as carcinogens are substances that are responsible for damaging DNA, promoting and aiding cancer. Tobacco, asbestos, radiation (gamma and x-rays), the sun, and car exhaust fumes are well known carcinogens.

There are a number of things that individuals can do to reduce their risk of getting cancer including eating a healthy diet and keeping to a healthy weight, avoiding tobacco, limiting alcohol consumption, and protecting one's skin from the sun.

In addition, the number of new cancers can be reduced and cancer deaths prevented by following recommended screening procedures. For example, cervical and colorectal cancers can be avoided by finding precancerous lesions, so they can be treated before they become cancerous. Screening for cervical, breast and colorectal cancers also help detect these cancers at an early and treatable stage.

Cancer statistics and screening rates for Middlesex County are noted below.

- The age-adjusted mortality rate due to cancer (183.61/100,000) decreased by more than 8 percentage points from 2004 to 2009 but remains significantly higher than the *Healthy People* 2020 target of 160.6/100,000.
- Overall cancer incidence decreased 6% between 2005 and 2010 (from 497.3/100,000 to 465.5/100,000), but is nearly three times greater than the *Healthy People 2020* target of 161.4/100,000.
- The percentage of Middlesex County women over age 40 who have <u>not</u> had a mammogram in the past two years (21.1%) exceeds the *Healthy People 2020* target of 18.9%.
- The percentage of Middlesex County residents who are heavy drinkers exceeds the County Health Ranking benchmark.

### 1. INTRODUCTION

Raritan Bay Medical Center (RBMC) is made up of two divisions, one located in Perth Amboy, the other in Old Bridge, New Jersey. RBMC is one of four acute care hospitals operating in Middlesex County. RBMC's primary service area comprises largely urban/suburban communities located in eastern Middlesex County.

Healthy People 2020 is a 10-year agenda to improve the nation's health that encompasses the entire continuum of prevention and care. For over three decades Healthy People has established benchmarks and monitored progress over time to measure the impact of prevention activities. Healthy People 2020 benchmarks are used throughout the report to assess the health status of residents.

The County Health rankings published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation ranks the health of nearly all counties in the United States. The rankings look at a variety of measures that affect health such as high school graduation rates, air pollution levels, income, rates of obesity and smoking, etc. These rankings are also used throughout the report to measure the overall health of Middlesex County residents. County rates are also compared to statewide rates and ranked by quartile. Green, the county ranks in the top 25%; yellow, the county is ranked in the second or third quartile; and red, the county is ranked in the worst performing quartile.

In June 2011, the National Prevention Council, created through the Affordable Care Act (ACA) in 2010, and tasked with the development of a National Prevention Strategy to realize the law's efforts to reduce costs, improve quality of care, and provide coverage options for the uninsured, published its strategy. The Council's overarching goal is to increase the number of Americans who are healthy at every stage of life. To achieve this goal, the strategy identifies four Strategic Directives and seven targeted Priorities. The Strategic Directions are core recommendations for developing a prevention-oriented society. The Strategic Directions are:

- **Healthy and Safe Community Environments**: Create, sustain, and recognize communities that promote health and wellness through prevention.
- **Clinical and Community Prevention Services:** Ensure that prevention-focused healthcare and community prevention efforts are available, integrated, and mutually reinforcing.
- **Empowered People:** Support people in making healthy choices.
- **Elimination of Health Disparities:** Eliminate disparities, improving the quality of life for all Americans.

With this framework, the Priorities provide directives that are most likely to reduce the burden of the leading causes of preventable death and major illness. The seven Priorities are:

- Tobacco Free Living
- Preventing Drug Abuse and Excessive Alcohol Use
- Healthy Eating
- Active Living

- Injury and Violence Free Living
- Reproductive and Sexual Health
- Mental and Emotional Well-Being

The RBMC needs assessment was undertaken in this context and developed for the purpose of enhancing the health and quality of life throughout the community.

### 2. METHODOLOGY

Data sources for the CHNA included secondary data and qualitative input derived from meetings/discussions with the public health community of Middlesex County and community providers and service agencies, as well as a survey of service area residents. This allowed the Medical Center to identify and prioritize the top issues facing residents in the service area.

### Secondary Data Source

Over 30 secondary data sources were used in this Community Health Needs Assessment (CHNA). These included the United States Census Bureau, Centers for Disease Control and Prevention (CDC), New Jersey Department of Health (NJDOH), Behavioral Risk Factor Surveillance System (BRFSS), and the County Health Rankings mentioned above. See Appendix A.

### **Primary Research**

NSI, Inc. subcontracted the Jackson Group to perform telephone surveys from June 25 through July 12, 2014. A random sample of 216 Perth Amboy Service Area residents and 282 Old Bridge Service Area residents participated; Combined Service Area sample size was 400 residents. In order to participate in the survey, respondents were required to be 18 years of age or older. Sixty percent of those contacted were reached on landline phones and 40% were mobile devices. Margin of error and confidence level indicate how well the sample represents the total population; the confidence interval for the combined Service Area was 95.55% with an error rate of 4.55. The survey instrument is located in Appendix B.

### Meetings with Community Service Providers, Agency and Health Department

RBMC convened a group of community stakeholders, civic leaders, provider agencies, the County Health Department, and community-based organizations to serve in an ongoing community advisory capacity at the beginning of the CHNA process.

The Task Force met five times during the planning process and will be convened quarterly beginning in 2015 to work together on priority issues and to review progress on the plan.

### **Priority Setting**

After reviewing the analysis of service gaps and health indicators on which the county/service area performed poorly, a list of 23 priority issues were identified to include the following areas:

- Heart Disease, CHF, High Blood Pressure, High Cholesterol, Stroke
- Cancer
- Mental Health and Alcohol/Substance Abuse
- Tobacco Use
- Diabetes
- COPD
- Asthma

- Immunization for the Elderly
- Healthy Nutrition/Obesity
- Physical Activity
- Good Schools
- C-section Rates
- Air Quality
- High Crime Rate/Safety
- Access to Healthy Food
- Poverty
- High School Completion Rates
- Limited English Proficiency
- Access to Health Services clinics, evening services, school-based services
- Teen Births
- Low Birth Weight Infants
- Renal Disease
- ED Utilization for Ambulatory Care Sensitive Conditions and other inappropriate use

The Task Force used seven prioritization criteria to rank the priority issues and determine the Top 5 issues. The criteria used were:

- 1. Number of people impacted
- 2. The risk of morbidity and mortality associated with the problem
- 3. Impact of the problem on vulnerable populations
- 4. Availability of resources to address the problem
- 5. Relationship of issue to other community issues
- 6. Meaningful progress can be made within a 3-year period
- 7. Is within the organization's capability/competency to impact

The Top 5 issues selected by the Task Force were:

- 1. Healthy Nutrition/Obesity
- 2. Mental Health and Alcohol/Substance Abuse
- 3. Heart Disease, CHF, High Blood Pressure, High Cholesterol, Stroke
- 4. Diabetes
- 5. Cancer

Task Force members agreed to proceed with these five issues as those the Task Force would focus its efforts on over the next three years. Members also agreed that although these five issues might be the highest priorities and the primary foci, many other issues (ranked lower) were intertwined with the Top 5 and, therefore, would also gain some peripheral attention. Some of the issues could be classified as social determinants of health and health status (such as poverty or education). Task Force members agreed it is unable to impact these areas, but will consider how the Task Force frames it ongoing efforts.

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### Service Area

RBMC is made up of two hospital divisions, each on a separate campus; one in Perth Amboy, New Jersey and the other in Old Bridge, New Jersey, both located in Middlesex County. Municipalities common to both facilities' service areas include:

08857 – Old Bridge 08859 – Parlin 08872 – Sayreville 08879 – South Amboy 08882 – South River

The Primary Service Area for the Perth Amboy Division includes the following zip codes:

08861 – Perth Amboy 07008 – Carteret 08879 – South Amboy 07095 – Woodbridge 08859 – Parlin 08857 – Old Bridge 08863 – Fords 08872 – Sayreville

08882 - South River

One of two Raritan Bay Medical Center hospitals is located within Perth Amboy. A medium-sized urban center, Perth Amboy is a working-class community which features a revitalized historic waterfront. More than three-quarters of residents (78%) are Hispanic, more than four times the County and State (18% each). Between 2012 and 2019, New Jersey and Middlesex County are projected to have a slight decline in 0-17 year olds; however, Perth Amboy anticipates a 2.5% increase in this age cohort.

Approximately one-third of Perth Amboy residents have less than a high school education, three times greater than the county and state (11%). The rate of family poverty within the municipality (17%) is more than triple county rates (5.4%) and double the state rate (7.4%). Average 2012 Perth Amboy municipal property tax bills were \$4,324.64, the highest in Middlesex County and nearly three times those of nearby Old Bridge Township. According to the New Jersey State Police Uniform Crime Rate Ranking, in 2012, Perth Amboy had a crime rate (28.1/1,000) far exceeding Middlesex County (18.5/1,000) and statewide (23.4/1,000).

The Primary Service Area for the Old Bridge Division includes the following zip codes:

08857 – Old Bridge 07747 – Matawan 08879 – South Amboy 08859 – Parlin 08831 – Monroe Township 08816 – East Brunswick 07726 – Englishtown 08872 – Sayreville 08882 – South River

Old Bridge Township, a bedroom suburb of New York City, features Cheesequake State Park and Raritan Bay Medical Center - Old Bridge. Of the 65,000 residents, three-quarters are White, 16% more than Statewide (59%). Fourteen percent of residents are Asian, 44% more than in New Jersey (8.3%). Ten percent of the population is Hispanic, 44% less than the county and state (18%).

Monroe, typically renowned for its age restrictive adult communities, experienced a 33% population increase between 2000 and 2012 and is projected to increase an additional 14% between 2012 and 2019. Monroe's senior population contributes to its growth, but this suburban community simultaneously is experiencing a surge in non-senior residential development as well. A new High School was built and opened in 2011. With a relatively low crime rate of 6.5/1,000 residents, Monroe is an attractive place for seniors and young families alike.

The service areas for each division were determined based on patient origin. The zip codes above represent 75% of each division's patient discharges.

Most of the secondary data in this report is based on county level data. City or zip code level data is provided wherever possible to enhance the understanding of the specific needs of service area residents. Data obtained from the qualitative analyses provide further insight into health issues facing the communities served by the Medical Center.

### **Resource Inventory**

A detailed listing of health and social services providers operating in the service areas is located in Appendix C. Maps by provider types are also provided.

- 6 -

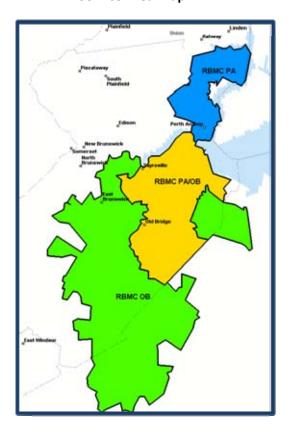


Figure 2.1 Service Area Map

### **Notes on Data Sources**

In reviewing the document, the following notes will facilitate understanding.

### **Color Indicator Tables**

Throughout the Health Profile Section, the reader will find tables that have red, yellow and green colored indicators. These tables compare the county level data to the *Healthy People 2020* targets, Community Health Rankings benchmarks and New Jersey State data. Data by race/ethnicity is compared to data for all races in the county, unless otherwise indicated.

Green means the indicator was within the top quartile (25%) of the benchmark (statewide, *Healthy People 2020*, Community Health Ranking). Yellow means it was within the next two quartiles; and red means it was in the lowest or worst quartile of the benchmark.

### 3. MIDDLESEX COUNTY OVERVIEW

Located in central New Jersey, Middlesex County boasts a high concentration of colleges and universities. Home to over 800,000 people, the County is predominantly composed of suburban municipalities and mid-sized urban centers (New Brunswick and Perth Amboy).

According to the U.S. Census Bureau, Middlesex is the second most populous county in the State and experienced an eight percent growth in population between 2000 and 2010. Approximately half of County residents are White, compared to 59% statewide. There is a concentrated Asian population within the County (21.6%), two and a half times greater than within New Jersey (8.3%). Similar to the State in 2012, women of child-bearing age (15-44) comprised 21.1% of the population; also similar to New Jersey, this cohort is projected to decrease 2.2% by 2019.

### 4. MIDDLESEX COUNTY/SERVICE AREA HEALTH PROFILE

The Middlesex County/Raritan Bay Medical Center Service Area Health Profile provides an analysis of health outcomes and health factors within the region and a comparative analysis to New Jersey and neighboring counties. Health outcomes depict the health of a region. Disease-specific mortality, health status and morbidity are among the outcomes presented. Health factors represent what influences the health within a geographic area. An evaluation of health behaviors, access to care, social, economic and cultural specific issues and behavioral health are also included.

### A. HEALTH OUTCOMES

### 1. Premature Deaths

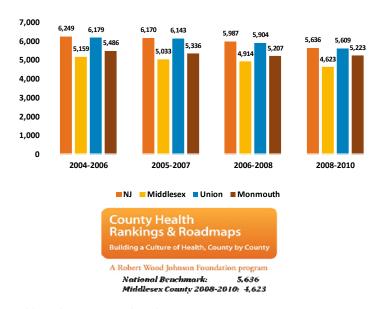
Years of Potential Life Lost (YPLL), an alternate method to reviewing crude or age-adjusted death rates to assess premature mortality, is often used to rank causes of death and prioritize public health issues. Premature deaths highlight preventable adverse outcomes. YPLL calculate premature mortality as the number of years of potential life lost for each death occurring before a predetermined end point, in this case, age 75 per 100,000 population.

- Middlesex County YPLL in 2008-2010 was 4,623/100,000, which is lower than the County Health Rankings national benchmark (CHR) of 5,636.
- Middlesex County experienced a 10.4% improvement in premature death from 2004-2006 to 2008-2010.
- Since 2004, premature deaths in Middlesex County have been consistently below those in the State and surrounding counties.

Figure 4.1

Premature Death: Years of Potential Life Lost Before Age 75

Age-Adjusted Rate/100,000 Population



Source: County Health Rankings; National Vital Statistics System

Note: Every death occurring before the age of 75 contributes to the total number of years of potential life lost

Figure 4.1 (Continued)

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PREMATURE DEATH: YEARS OF POTENTIAL LIFE LOST BEFORE AGE 75  Age-Adjusted Rate/100,000 Population	n/a		
RED: Poorest Performing Quartile			

### 2. Leading Cause of Death

Yellow: Middle Quartiles Green: Best Performing Quartile

Mortality statistics, one of few data sets that are comparable for small geographic areas and available for long time periods (<a href="http://www.cdc.gov/nchs/deaths.htm">http://www.cdc.gov/nchs/deaths.htm</a>), are a primary source for public health planning.

- Between 2005 and 2009, age-adjusted mortality rates (AAMR) increased for kidney disease (33.8%), Alzheimer's disease (27.8%), unintentional injuries (24.2%) and chronic lower respiratory disease (CLRD) (5.3%).
- Despite decreases in incidence from 2005 to 2009, heart disease (177.7/100,000) and cancer (170.7/100,000) remain far more prevalent causes of death than the third leading cause, CLRD (29.6/100,000).
- Between 2005 and 2009, half of the age-adjusted top 10 leading causes of death for Middlesex County showed improvement including: stroke(-21.6%), diabetes mellitus(-19.7%), heart disease(-18.5%), septicemia(-2.5%), and cancer(-2.3%).

Figure 4.2
Total 10 Causes of Death in Middlesex County
Age-Adjusted Rate/100,000 Population

CAUSE	2005	2009	% Change
Diseases of heart	218.0	177.7	-18.5%
Malignant neoplasms (cancer)	174.7	170.7	-2.3%
Chronic lower respiratory diseases (CLRD)	28.1	29.6	5.3%
Unintentional injuries	22.7	28.2	24.2%
Cerebrovascular diseases (stroke)	34.7	27.2	-21.6%
Septicemia	20.4	19.9	-2.5%
Nephritis, nephrotic syndrome and nephrosis	14.5	19.4	33.8%
Diabetes mellitus	22.8	18.3	-19.7%
Alzheimer's disease	9.7	12.4	27.8%
All other diseases (residual)	78.3	78.9	0.8%

Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

### **Heart Disease**

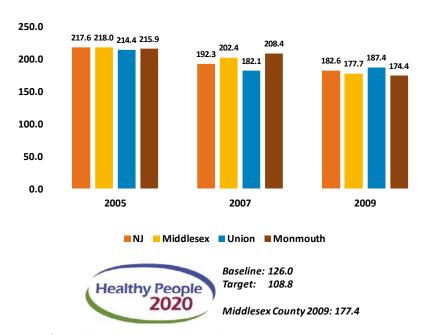
Heart disease bundles several conditions, most commonly, coronary artery disease, angina, heart failure and arrhythmias. Nationally, statewide and in Middlesex County, heart disease is the leading cause of death. Responsible for 1 in every 4 deaths, approximately 600,000 people die of heart disease in the United States each year. Annually, the United States spends \$108.9 billion on health care, medications and lost productivity as a result of coronary heart disease alone.

- Deaths due to heart disease declined 18.5% between 2005 and 2009 from 218.0/100,000 to 177.4/100,000 but still exceed the *Healthy People 2020* goal of 108.8/100,000 by 63%.
- In 2009, Middlesex County Whites had the highest mortality rate for heart disease in the county at 193.0/100,000 as compared to 158.7/100,000 for Blacks.

Figure 4.3

Deaths Due to Diseases of the Heart

Age-Adjusted Rate/100,000 Population



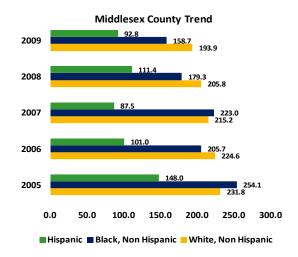
Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO DISEASES OF THE HEART  Age-Adjusted Rate/100,000 Population		n/a	
RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Best Performing Quartile			

Figure 4.4

Deaths Due to Diseases of the Heart by Race/Ethnicity

Age-Adjusted Rate/100,000 population



Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO DISEASES OF THE HEART (Black, Non-Hispanic)  Age-Adjusted Rate/100,000 Population	n/a	n/a	
RED: Poorest Performing Quartile  Yellow: Middle Quartiles			
Green: Rest Performing Quartile			

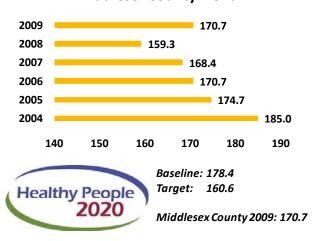
### Cancer

Cancer is the general name for a group of more than 100 diseases. Although there are many kinds of cancer, all originate from abnormal cells. Untreated cancers cause serious illness and death. (<a href="http://www.cancer.org/cancer/cancerbasics/what-is-cancer">http://www.cancer.org/cancer/cancerbasics/what-is-cancer</a>) Approximately half of all men and one-third of all women in the US will develop cancer during their lifetimes. The risk of developing most types can be reduced by changes in lifestyle: avoiding tobacco, using sun protection, being physically active and eating healthy foods. Early detection greatly improves positive outcomes. (<a href="http://www.cancer.org/cancer/cancerbasics/questions-people-ask-about-cancer">http://www.cancer.org/cancer/cancerbasics/questions-people-ask-about-cancer</a>) Cancer is the second leading cause of death in the United States, New Jersey and Middlesex County.

- Middlesex County deaths due to cancer declined 8% from 185/100,000 in 2004 to 170.7/100,000 in 2009.
- Despite improvement, the AAMR exceeds the Healthy People 2020 target of 160.6/100,000 by
   6.3%

Figure 4.5
Deaths Due to Malignant Neoplasms (Cancer)
Age-Adjusted Rate/100,000 Population





Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO MALIGNANT NEOPLASMS (Cancer)  Age-Adjusted Rate/100,000 Population		n/a	

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

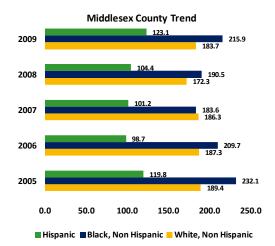
Green: Best Performing Quartile

- In 2009, deaths due to cancer in New Jersey, Middlesex County and surrounding counties are highest among Black non-Hispanics.
- In 2009, deaths among Black non-Hispanics (215.9/100,000) exceeded the *Healthy People 2020* target by 56.8%.

Table 4.6

Deaths Due to Malignant Neoplasms (Cancer) By Race / Ethnicity

Age-Adjusted Rate / 100,000 Population



Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

### Chronic Lower Respiratory Diseases (CLRD)

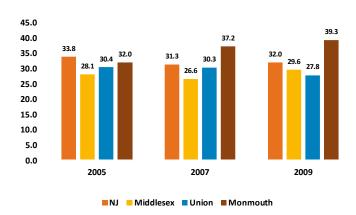
CLRD includes Chronic Obstructive Pulmonary Disease (COPD), asthma, chronic bronchitis, emphysema, and other lower respiratory illnesses. In a June 2011 National Center for Health Statistics (NCHS) Data Brief, the CDC indicated Chronic Lower Respiratory Disease (CLRD) surpassed stroke to become the third leading cause of death in the United States in 2008.

- Middlesex County CLRD AAMR increased 5.3% from 28.1/100,000 in 2005 to 29.6/100,000 in 2009 compared to a 5.3% decrease statewide from 33.8/100,000 in 2005 to 32/100,000 in 2009.
- In 2009, Middlesex County had 7.5% fewer deaths due to CLRD than statewide.

Figure 4.7

Deaths Due to Chronic Lower Respiratory Disease (CLRD)

Age-Adjusted Rate / 100,000 Population



Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

### **Unintentional Injuries**

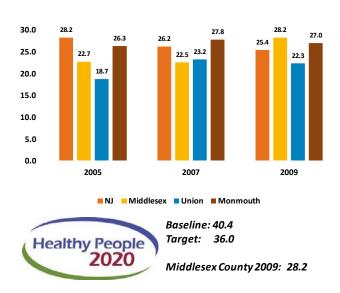
Most unintentional injuries are preventable and predictable. Deaths as a result of unintentional injury occur from motor vehicle accidents, falls, firearms, drownings, suffocations, bites, stings, sports/recreational activities, natural disasters, fires, burns and poisonings. Public Health prevention strategies such as minimum age drinking requirements, seatbelt and helmet laws, smoke alarms, exercise programs and other safety awareness campaigns reduce unintentional injury and death. (http://www.cdph.ca.gov/programs/ohir/Pages/UnInjury2010Background.aspx)

- Despite a 9.9% statewide reduction in deaths due to unintentional injury between 2005 and 2009, Middlesex County deaths increased 24.2% in that same time frame from 22.7/100,000 to 28.2/100,000.
- 2009 Middlesex County rates of death due to unintentional injury were 21.6% lower than the *Healthy People 2020* target of 36/100,000.

Figure 4.8

Deaths Due to Unintentional Injuries

Age-Adjusted Rate/100,000 Population



Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

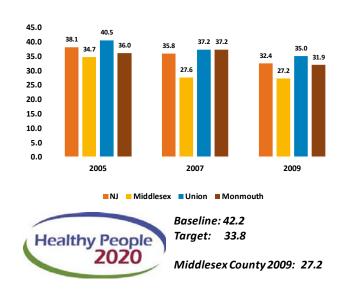
INDICATOR		HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
<b>DEATHS DUE TO UNINTENTIONAL INJURIES</b> Age-Adjusted Rate/100,000 Population			n/a	
RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Rest Performing Quartile				

### Stroke (Cerebrovascular Diseases)

A stroke occurs when a clot blocks the blood supply to the brain or when a blood vessel in the brain bursts.

- The 2009 Middlesex County stroke AAMR (27.2/100,000) is 16% lower than the New Jersey stroke AAMR (32.4/100,000) and 19.5% lower than the *Healthy People 2020* target rate (33.8/100,000).
- The Middlesex County stroke AAMR decreased 21.6% from 34.7/100,000 in 2005 to 27.2/100,000 in 2009.
- In 2009, the Middlesex County death rate for strokes for Blacks (50.2/100,000) was 85% greater than the rate for Whites (27.1/100,000).

Figure 4.9
Deaths Due to Stroke
Age-Adjusted Rate/100,000 Population



Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO CEREBROVASCULAR DISEASE (STROKE)  Age-Adjusted Rate/100,000 Population		n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

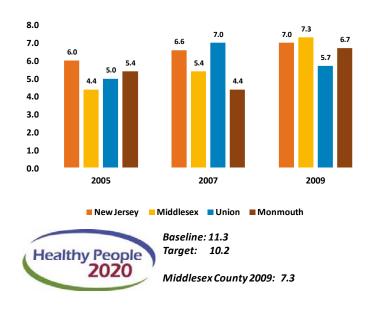
### 3. <u>Behavioral Health-Related Deaths</u>

Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. There is emerging evidence that positive mental health is associated with improved health outcomes.

Mental illness is defined as collectively all diagnosable mental disorders or health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning. Depression is the most common type of mental illness, affecting more than 26% of the U.S. adult population. It has been estimated that by the year 2020, depression will be the second leading cause of disability throughout the world, trailing only ischemic heart disease. (http://www.cdc.gov/mentalhealth/basics.htm)

- Middlesex County deaths due to suicide increased 39.7% from 4.4/100,000 in 2005 to 7.3/100,000 in 2009.
- The 2009 Middlesex County suicide rate is 4% greater than State (7/100,000) and 28.4% lower than the *Healthy People 2020* target (10.2/100,000).

Figure 4.10
Deaths Due to Suicide
Age-Adjusted Rate/100,000 Population



Source: NJDOH, Center for Health Statistics; NJ State Health Assessment Data

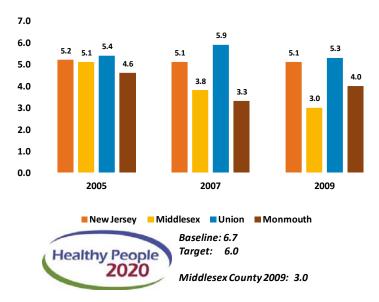
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO SUICIDE  Age-Adjusted Rate/100,000 Population		n/a	
RED: Poorest Performing Quartile Yellow: Middle Quartiles Green: Best Performing Quartile			

### 4. Infant Mortality

Infant mortality is defined as the death of a baby prior to his or her first birthday. The infant mortality rate, traditionally used as an indicator of the health and well-being of a nation, is the number of infant deaths for every 1,000 live births. There remain great disparities in infant mortality by age, race, and ethnicity. The most frequent causes of infant mortality are:

- ♦ Serious birth defect
- Preterm birth / low birth weight
- Sudden Infant Death Syndrome (SIDS)
- Maternal complications of pregnancy
- Injury
   (http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm)
- Infant deaths in Middlesex County declined 41.2% from 2005 (5.1/1,000) to 2009 (3.0/1,000)
- The 2009 Middlesex County infant mortality rate is 41.2% lower than the State (5.1/1,000) and 50% less than the *Healthy People 2020* target (6.0/1,000).

Figure 4.11
Infant Mortality Rate: Rate of Infant (Under 1 Year) Deaths/
1,000 Live Births



Source: NJDOH, Center for Health Statistics, NJ State Health Assessment Data – 2009 is most recent year available.

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
INFANT MORTALITY RATE Rate of Infant (Under 1 Year) Deaths / 1,000 Live Births		n/a	
RED: Poorest Performing Quartile			

3/9/2015

Yellow: Middle Quartiles
Green: Best Performing Quartile

### 5. Low and Very Low Birth Weight Infants

The single most important factor affecting neonatal mortality and a significant determinant of post neonatal mortality is a birth weight less than 2,500 grams. Low birth weight infants who survive are at increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders.

(http://www.cdc.gov/PEDNSS/how to/interpret data/case studies/low birthweight/what.htm)

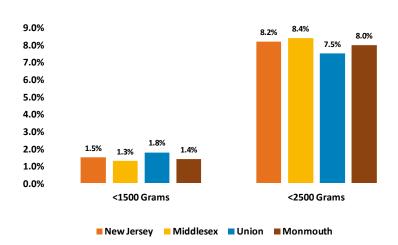
- In 2010, 8.4% of Middlesex County babies were low birth weight (less than 2500 grams), exceeding the *Healthy People 2020* target of 7.8%.
- More 2010 Middlesex County (8.4%) babies were born with low birth weight than those in New Jersey (8.2%), Union (7.3%) and Monmouth (8%) Counties.

Very low birth weight babies, less than 1,500 grams, are at even greater risk than low birth weight babies.

• Middlesex County very low birth weight infants declined from 1.5% in 2006 to 1.3% to 2010 and exceeded the *Healthy People 2020* target of 1.4%.

Figure 4.12

Low Birth Weight: Percent of Live Births with Low and Very Low Birth Weight (2010)



Source: NJDOH, Bureau of Vital Statistics and Registration, NJ Birth Certificate Database Note: Percentages are based on the total number of live births for the County and State



Figure 4.12 (Continued)

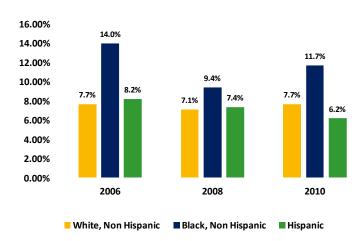
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
LOW BIRTHWEIGHT (<2,500 Grams) Percentage of Live Births		n/a	
LOW BIRTHWEIGHT (<2,500 Grams) (Black, Non-Hispanic) Percentage of Live Births	n/a	n/a	
VERY LOW BIRTHWEIGHT (<1,500 Grams) Percentage of Live Births		n/a	
VERY LOW BIRTHWEIGHT (<1,500 Grams) (Black, Non-Hispanic) Percentage of Live Births	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Racial disparities in low birth weight babies persist; nationally, non-Hispanic Black infants continue to die at nearly twice the rate of non-Hispanic White infants.

- In 2010 there were 51.9% more Black low birth weight infants in Middlesex County (11.7%) than Whites (7.7%).
- Middlesex County Hispanics experienced a 2.3% decline in low birth weight babies from 2006 to 2010.
- In 2010, the disparity between Middlesex County Black and White very low birth weight babies was 4.1% compared to 1.1%.

Figure 4.13
Low Birth Weight\*: By Mother's Race/Ethnicity
Percent of Live Births with Low Birth Weight (2010)



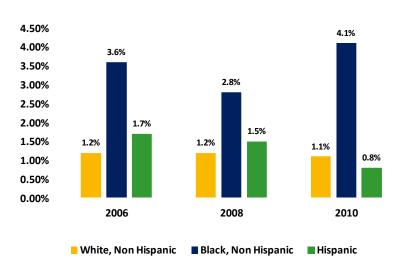
Source: NJDOH, Bureau of Vital Statistics and Registration, NJ Birth Certificate Database

Note: \*Percentages are based on the total number of Low or Very Low Birth weight Births / Live births for the County and State.

Figure 4.14

Low Birth Weight\*: By Mother's Race/Ethnicity

Percent of Live Births with Very Low Birth Weight (2010)



Source: NJDOH, Bureau of Vital Statistics and Registration, NJ Birth Certificate Database

Note: \*Percentages are based on the total number of Low or Very Low Birth weight Births / Live births for the County and State.

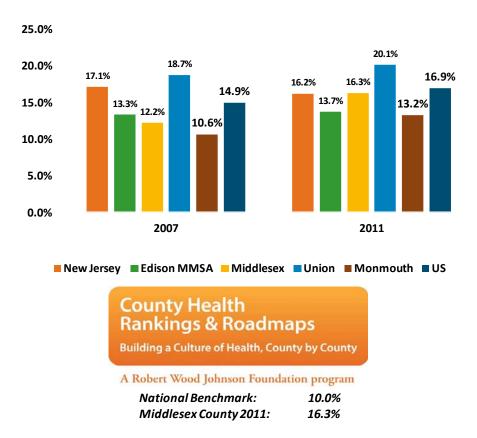
### 6. Health Status and Behavioral Health Status

Health status and behavioral health status are broad multidimensional concepts that usually include self-reported measures of physical and mental health. Key subjective determinants to measure health status are provided below. The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions and use of preventive services. BRFSS collects data in all 50 states as well as the District of Columbia and three U.S. territories.

#### **General Health Status**

- BRFSS data reported a 4.1 point increase between 2007 (12.2%) and 2011 (16.3%) of Middlesex County residents who indicate their health as "poor or fair."
- 2011 Middlesex County BRFSS data on "poor or fair" health exceeds the CHR benchmark of 10% by 63%.
- BRFSS reported that the age-adjusted Middlesex County number of physically unhealthy days in the last 30 days was 3.0 from 2006 through 2012, not meeting the CHR national benchmark of 2.5.

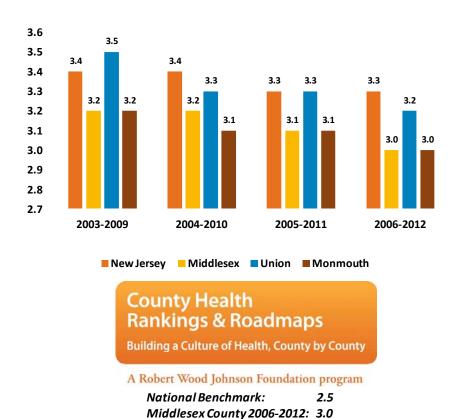
Figure 4.15
Percent of Respondents Reporting Their Health as "Fair or Poor"



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
REPORTED "FAIR" OR "POOR" HEALTH Percentage of Respondents	n/a		
RED: Poorest Performing Quartile Yellow: Middle Quartiles			
Green: Best Performing Quartile			

Figure 4.16
Average Number of Physically Unhealthy Days Reports in Past 30 Days
Age-Adjusted



Source: County Health Rankings; National Center For Health Statistics

Note: The poor physical health measure is based on response to the question: "Thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?"

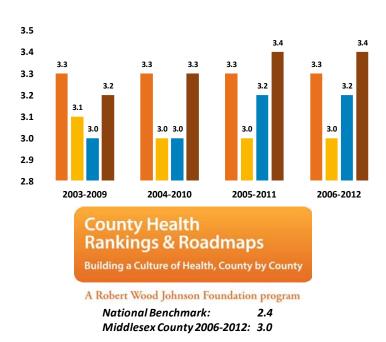
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PHYSICALLY UNHEALTHY DAYS REPORTED IN THE PAST 30 DAYS  Average Age-Adjusted Number	n/a		

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

### **Behavioral Health Status**

- From 2006 to 2012, Middlesex County residents reported 3 days as the average number of mentally unhealthy days in the last 30.
- The Middlesex County 2006-2012 average number of unhealthy days is lower than the New Jersey (3.3) and surrounding counties but surpasses the CHR benchmark (2.4).

Figure 4.17
Average Number of Mentally Unhealthy Days Reported in the Past 30 Days



Source: County Health Rankings; National Center For Health Statistics

Green: Best Performing Quartile

Note: The poor mental health measure is based on response to the question: "Thinking about your mental health, which includes stress, depression and problems with emotions, how many days during the past 30 days was your mental health not good?"

HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
n/a		
	2020 TARGET	2020 TARGET RANKINGS BENCHMARK

# 7. Morbidity

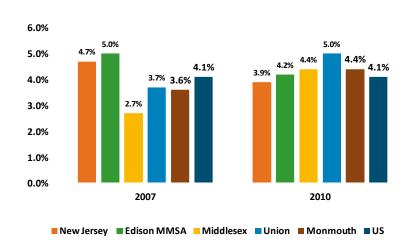
According to County Health Rankings, morbidity is measured as quality of life and refers to how healthy people feel while alive.

Morbidity related to cardiovascular disease includes heart disease and stroke.

#### **Heart Disease**

- According to 2010 BRFSS, 4.4% of Middlesex County residents reported being told they had heart disease compared to 3.9% in New Jersey.
- Between 2007 (2.7%) and 2010 (4.4%), an additional 1.7 point increase of the adult population reporting diagnosis of angina or coronary heart disease.

Figure 4.18
Cardiovascular Disease (Percent "Yes")
Were You Ever Told You Had Angina or Coronary Heart Disease?



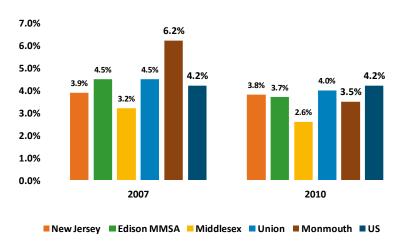
Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
CARDIOVASCULAR DISEASE  Were You Ever Told You Had Angina Or Coronary Heart Disease?  % Yes	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

- Middlesex County residents reporting a heart attack decreased from 3.2% in 2007 to 2.6% in 2010.
- In 2010, 31.6% fewer Middlesex County (2.6%) residents were told they had a heart attack than across the state (3.8%).

Figure 4.19
Cardiovascular Disease (Percent "Yes")
Were You Ever Told You Had A Heart Attack? (Myocardial Infarction)



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
CARDIOVASCULAR DISEASE  Were You Ever Told You Had A Heart Attack?  %Yes	n/a	n/a	

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

### Heart Disease Hospital Use Rates for County, PSA, Perth Amboy and Old Bridge

In order to obtain comparable data on the disease burden in the region, hospital use rates were developed and analyzed for the county, service areas, Perth Amboy and Old Bridge. Calculated disease incidence includes inpatient, emergency department and same day data.

 Middlesex County heart attack use rates (2009-2012) are lower than those in the hospital service areas (combined, RBMC PA, RBMC OB) and the ZIP codes of Perth Amboy and Old Bridge.  Between 2009 and 2012, Perth Amboy residents exhibited the highest utilization rate for heart attacks in 2011, 1.72/1,000 and Old Bridge residents reported the lowest rate of 1.2/1,000 in 2011.

Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 280-285

- Between 2009 and 2012, hospital use rates for heart failure in Middlesex County are lower than the hospital service areas, Perth Amboy and Old Bridge ZIP codes.
- Between 2009 and 2012, Perth Amboy residents exhibited the highest hospital utilization rate for heart failure/CHF, 4.07/1,000 in 2010 and Middlesex County residents reported the lowest rate, 2.9/1,000 in 2011.

Acute Care IP; Same Day and ED Discharges; Rate / 1,000 Population

3.49 3.51 3.24 3.24 3.60 3.49 3.54 3.54 3.64 3.59 3.42 3.44 3.85 4.07 3.14 3.29 3.85 3.63 3.60 3.96

RBMC-PAServ Area RBMC-OB Serv Area COMBINED Serv Area PERTH AMBOY OLD BRIDGE MIDDLESEX COUNTY

Figure 4.21
Heart Failure/CHF
Acute Care IP; Same Day and ED Discharges; Rate / 1,000 Population

Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 291-293

2010

2009

#### Stroke

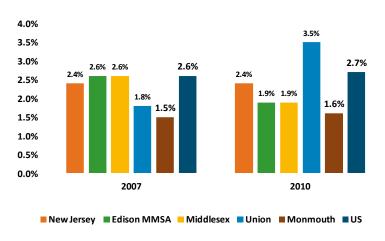
6.00

4.00

2.00

- BRFSS indicates a decline in Middlesex County residents reporting a stroke between 2007 and 2010 from 2.6% to 1.9%.
- In 2010, Middlesex County (1.9%) reported fewer strokes than the state (2.4%) and the Country (2.7%).

Figure 4.22
Cardiovascular Disease (Percent "Yes")
Have You Ever Been Told You Had A Stroke?



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDICATOR

HEALTHY PEOPLE 2020 TARGET

COUNTY HEALTH RANKINGS JERSEY

STROKE

n/a

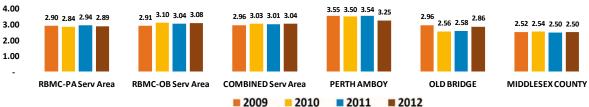
n/a

Have You Ever Been Told You Had A Stro % Yes				
RED: Poorest Performing Quartile				
Yellow: Middle Quartiles				
Green: Best Performing Quartile				

## Stroke Hospital Use Rates for County, PSA, Perth Amboy and Old Bridge

- From 2009 through 2012, Perth Amboy had the highest hospital utilization rate for stroke/TIA compared to the RBMC service areas, Old Bridge and Middlesex County.
- In 2012, Perth Amboy (3.3/1,000) has the highest hospital use rates for stroke/TIA in the region.

Figure 4.23
Stroke/TIA
Acute Care IP; Same Day and ED Discharges; Rate / 1,000 Population



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 061-069

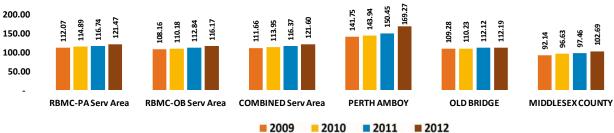
According to the American Heart Association, risk factors associated with developing cardiovascular disease include:

- ♦ High blood pressure
- ♦ High cholesterol
- ♦ Cigarette smoking
- ♦ Physical inactivity
- ♦ Poor diet, overweight and obesity
- ♦ Diabetes

### Hypertension Hospital Use Rates for County, PSA, Perth Amboy and Old Bridge

- The hospital use rate for hypertension discharges/1,000 population is highest in Perth Amboy and the RBMC-PA service area.
- The utilization rate for hypertension increased from 2009 through 2012 across all geographies reviewed.

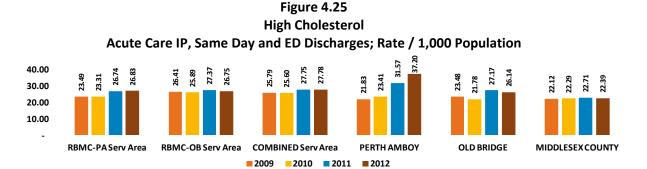
Figure 4.24
Hypertension
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes in Range 401-405.99 (Appearing Anywhere In First 13 DX Codes On Patient Record)

### High Cholesterol Hospital Use Rates for County, PSA, Perth Amboy and Old Bridge

• In 2012, the hospital use rate for high cholesterol discharges/1,000 population was highest in Perth Amboy (37.2/1,000) and increased 70% between 2009 and 2012.

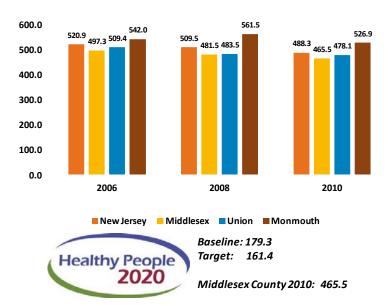


Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes 272.0 or 272.2 (Appearing Anywhere In First 13 DX Codes On Patient Record)

#### Cancer

- Incidence of overall invasive cancer in Middlesex County decreased 6.4% from 497.3/100,000 in 2006 to 465.5/100,000 in 2010.
- Middlesex County's overall invasive cancer incidence is almost three times greater than *Healthy People 2020* target of 161.4.
- In 2010, the overall incidence of cancer in Middlesex County (465.5/100,000) was less than the State (488.3/100,000).

Figure 4.26
Overall Invasive Cancer Incidence
Age-Adjusted Rate / 100,000 Population



Source: NJDOH, New Jersey Cancer Registry

Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate /

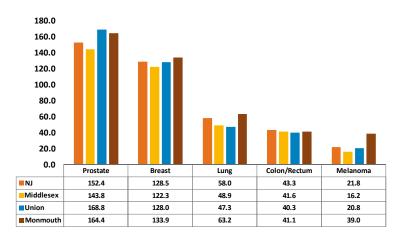
100,000 for Breast Cancer is based on Females

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
OVERALL CANCER INCIDENCE  Age-Adjusted Rate / 100,000 Population		n/a	
RED: Poorest Performing Quartile			

Yellow: Middle Quartiles Green: Best Performing Quartile

- In 2010, prostate (143.8/100,000) and breast (122.3/100,000) cancers had the highest incidence rates of the top five cancers, followed by lung (48.9/100,000), colon/rectum (41.6/100,000) and melanoma (16.2/100,000) in Middlesex County.
- In 2010, prostate cancer, breast cancer and melanoma rates in Middlesex County were lower than surrounding geographies.

Figure 4.27
Invasive Cancer Incidence By Site
Age-Adjusted Rate / 100,000 Population



Source: NJDOH, New Jersey Cancer Registry

Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100,000 for

Breast Cancer is based on Females

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
CANCER INCIDENCE BY SITE: PROSTATE  Age-Adjusted Rate/100,000 Population	n/a	n/a	
CANCER INCIDENCE BY SITE: BREAST  Age-Adjusted Rate/100,000 Population	n/a	n/a	
CANCER INCIDENCE BY SITE: LUNG  Age-Adjusted Rate/100,000 Population	n/a	n/a	
CANCER INCIDENCE BY SITE: MELANOMA OF THE SKIN  Age-Adjusted Rate/100,000 Population	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

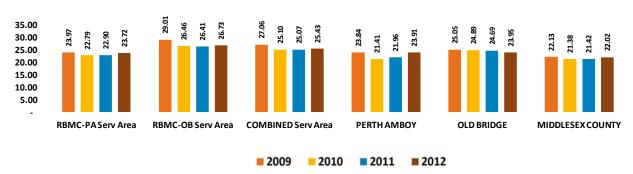
## Cancer Hospital Use Rates for County, PSA, Perth Amboy and Old Bridge

- Hospital use rates for cancer per 1,000 population are highest in the RBMC-OB service area from 2009 through 2012.
- Hospital use rates for residents with a history of cancer are greatest in the RBMC-OB service area from 2009 through 2012.

Figure 4.28

Cancer

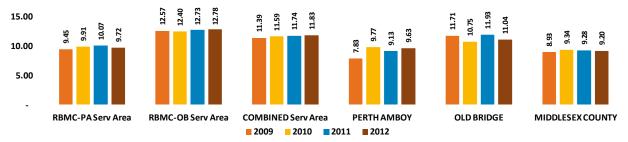
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census

Definition: Inpatient, Same Day Stay and ED Discharges – New Solution's Inc. Oncology Product Line (includes History of Cancer)

Figure 4.29
History of Cancer
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census

Definition: Inpatient, Same Day Stay and ED Discharges - New Solution's Inc. Oncology Product Line (History of Cancer Only)

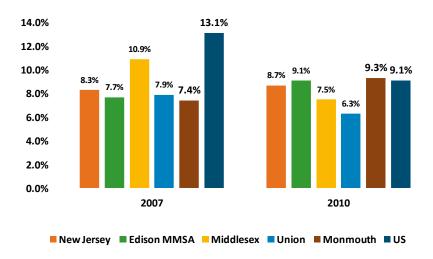
#### **Asthma**

Asthma is a chronic lung disease that inflames and narrows the airways. Asthma causes recurring periods of wheezing, chest tightness, shortness of breath and coughing. Often asthma onsets during childhood. (<a href="http://www.nhlbi.nih.gov/health/health-topics/topics/asthma">http://www.nhlbi.nih.gov/health/health-topics/topics/asthma</a>) The exact cause of asthma is unknown. Researchers believe genetic and environmental factors interact to cause asthma. These factors include:

- Atopy, an inherited tendency to develop allergies
- Parents with asthma
- Certain respiratory infections during childhood
- Contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing (<a href="http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/causes">http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/causes</a>)

- According to the BRFSS 2010 survey 7.5% of Middlesex County adults reported ever being told they had asthma.
- The percent of Middlesex County residents with asthma (7.5%) was lower in 2010 than the state (8.7%) and the U.S. (9.1%).

Figure 4.30
Asthma (Percent "Yes")
Adults Who Have Ever Been Told They Have Asthma



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

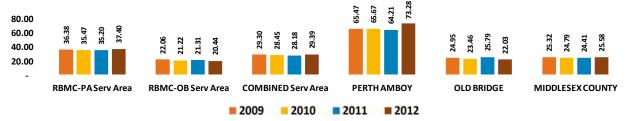
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
ASTHMA Adults Who Have Ever Been Told They Have Asthma %Yes	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

### Asthma Hospital Use Rates for County, PSA, Perth Amboy and Old Bridge

• 2012 hospital use rates for Asthma in Perth Amboy (73.3/1,000) are nearly 3 times the Middlesex County (25.6/1,000) rate.

Figure 4.31
Asthma
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population



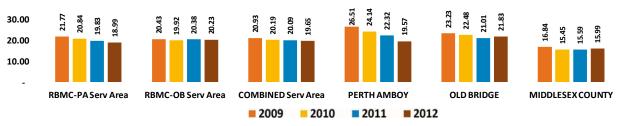
Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Range 493-493.9 (Appearing Anywhere In First 13 DX Codes On Patient Record)

### **COPD** (excluding Asthma)

Chronic Obstructive Pulmonary Disease, or COPD, refers to a group of diseases that cause airflow blockage and breathing-related problems. It includes emphysema, chronic bronchitis, and in some cases asthma. In the United States, tobacco smoke is a key factor in the development and progression of COPD, although exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role. COPD was the third leading cause of death in the United States in 2011. Fifteen million **Americans** report that they have been diagnosed with COPD. (http://www.cdc.gov/copd/)

- Hospital use rates for residents with COPD are higher in the Combined RBMC Service Area than in Middlesex County.
- Perth Amboy exhibited a decline in utilization from 26.5/1,000 in 2009 to 19.6/1,000 in 2012.

Figure 4.32 COPD (excluding Asthma) Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Ranges 490-492 & 494-496 (Appearing Anywhere In First 13 DX Codes On Patient Record)

#### **Diabetes**

Diabetes is a group of diseases marked by high levels of blood glucose resulting from problems in how insulin is produced, how insulin works, or both. People with diabetes may develop serious complications such as heart disease, stroke, kidney failure, blindness, amputation and premature death.

The three most common types of diabetes are Type 1, Type 2 and Gestational diabetes.

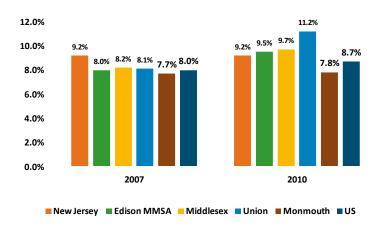
Type 1 diabetes develops when the cells that produce insulin in the pancreas are destroyed. To survive, people with type 1 diabetes must have insulin delivered by injection or a pump. There is no known way to prevent type 1 diabetes.

Type 2 diabetes usually begins with insulin resistance, a disorder in which the cells primarily within the muscles, liver, and fat tissue do not use insulin properly. The risk for developing type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanics/Latinos, American Indians, some Asians, and Native Hawaiians or other Pacific Islanders are at particularly high risk for type 2 diabetes.

Gestational diabetes is a form of glucose intolerance diagnosed during the second or third trimester of pregnancy. The risk factors for gestational diabetes are similar to those for type 2 diabetes. (http://www.cdc.gov/diabetes/pdfs/data/2014-report-generalinformation.pdf)

- Diabetes has been on the rise among Middlesex County residents. Between 2007 (8.2%) and 2010 (9.7%), an additional 1.5 percentage point increase of County residents reported having the disease.
- New Jersey residents with diabetes remained constant from 2007 to 2010 at 9.2%.

Figure 4.33
Diabetes (Percent "Yes")
Have You Ever Been Told By A Doctor That You Have Diabetes?



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

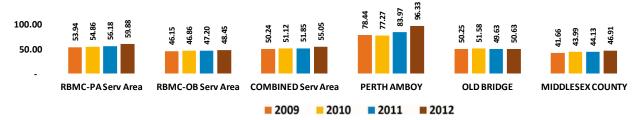
Figure 4.33 (Continued)

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DIABETES  Have You Ever Been Told By A Doctor That You Have Diabetes  % Yes	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

• The 2012 diabetes utilization rate in Perth Amboy (96.3/1,000) is two times the Middlesex County rate (46.9/1,000).

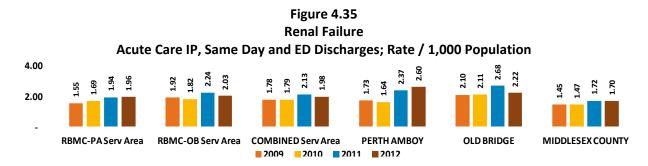
Figure 4.34
Diabetes
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In The Range 249.00-250.03 (Appearing Anywhere In First 13 DX Codes On Patient Record)

Diabetes is a contributing factor to renal failure. More than 35% of U.S. adults with diabetes have chronic kidney disease. High blood sugar and high blood pressure increase the risk that chronic kidney disease will eventually lead to kidney failure. (<a href="http://www.cdc.gov/Features/WorldKidneyDay/">http://www.cdc.gov/Features/WorldKidneyDay/</a>)

• Renal failure incidence increased 50% in Perth Amboy from 1.7/1,000 in 2009 to 2.6/1,000 in 2012.



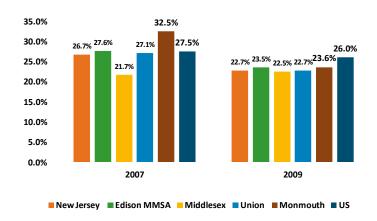
Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges For MS-DRGs In the Range 682-685

#### **Arthritis**

Arthritis affects 52.5 million U.S. adults, more than 1 in 5. It is the nation's most common cause of disability. Although arthritis literally means joint inflammation, the term arthritis describes more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround the joint and other connective tissue. The pattern, severity and location of symptoms can vary depending on the specific form of the disease. Typically, rheumatic conditions are characterized by pain and stiffness in and around one or more joints. The symptoms can develop gradually or suddenly. (http://www.cdc.gov/arthritis/basics.htm)

• In 2009, 22.5% of Middlesex County residents reported arthritis, similar to statewide figure of 22.7%.

Figure 4.36
Arthritis (Percent "Yes")
Adults Who Have Ever Been Told They Have Arthritis



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

#### B. HEALTH FACTORS

Health determinants are factors that contribute to a person's current state of health. Scientists generally recognize five determinants of health of a population:

- Biology/genetics
- Individual behavior
- Social environment
- Physical environment
- Health services

(http://www.cdc.gov/socialdeterminants/Definitions.html)

## 1. <u>Socioeconomic Status</u>

According to *Healthy People 2020*, socioeconomic factors contribute to disparities in disease incidence and mortality among racial, ethnic and underserved groups. The City of Perth Amboy exemplifies these disparities.

#### **Poverty**

The Legal Service of New Jersey Poverty Research Institute's annual report, *Poverty Benchmarks 2013, Assessing New Jersey's Progress in Combating Poverty,* discusses that the federal poverty level (FPL) understates true poverty, individuals that fall 250% below FPL. The FPL is prejudicial to New Jersey as it fails to adjust for any difference in the cost of living across states. Poverty rates in New Jersey reached record highs in 2011. Middlesex is ranked 12/21 New Jersey counties with 21.6% of residents below 200% FPL.

County level analysis masks concentrated poverty. In 2011, of 110 mid-sized municipalities with populations between 20,000 and 65,000 people, Perth Amboy had the fifth highest overall poverty level (43.8%), incomes below 200 percent the FPL, sixth highest (56.3%) percent of children below 200% FPL and fifth highest poverty level (46.2%) for the elderly population.

http://www.lsnj.org/PDFs/budget/Benchmarks2013.pdf

- According to the US Census, in 2012, Middlesex County (8.11%) had fewer individuals living below the federal poverty level than New Jersey (9.87%).
- The 2012 ACS Survey reports 17% of Perth Amboy families and 11.9% of Carteret families were living below the FPL compared to 5.4% in Middlesex County overall.

Figure 4.37

INDIVIDUALS BELOW POVERTY (2012*)			FAMILIES BELOW P	OVERTY (20	)12*
GEOGRAPHIC AREA	#	%	GEOGRAPHIC AREA	#	%
New Jersey	850,559	9.87%	New Jersey	163,613	7.4
Middlesex County	63,333	8.11%	Middlesex County	10,996	5.4
RBMC PA	23,308	9.56%	RBMC PA	4,805	7.7
RBMC OB	13,196	4.52%	RBMC OB	2,717	3.4
08861 Perth Amboy	10,740	20.43%	08861 Perth Amboy	2,141	17.0
07008 Carteret	3,034	13.25%	07008 Carteret	674	11.9
08882 South River	1,508	9.45%	07001 Avenel	243	6.8
07001 Avenel	1,081	8.08%	08859 Parlin	377	6.5
08863 Fords	839	6.92%	08882 South River	237	6.2

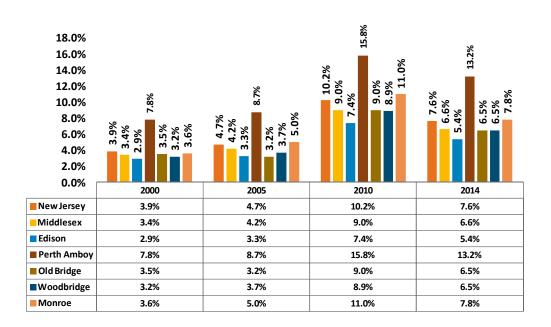
<sup>\*</sup>Source: US Census ACS Survey 2012 5 Year Estimates

### Unemployment

Those who are unemployed face greater challenges to health and well-being, including lost income and health insurance. Unemployed individuals are 54% more likely to be in poor or fair health as compared to employed individuals. Racial and ethnic minorities and those with less education, often already atrisk for poor health outcomes, are most likely to be unemployed. (<a href="www.countyhealthrankings.org/our-approach/health-factors">www.countyhealthrankings.org/our-approach/health-factors</a>) Labor statistics indicate unemployment rates peaked at the height of the recession in 2010 and began to show improvement by 2014.

- In 2014, the Perth Amboy unemployment rate (13.2%) was double that of Middlesex County (6.6%).
- Between 2010 and 2014, New Jersey, Middlesex County, Edison, Old Bridge and Woodbridge experienced at least a 25% reduction in unemployment while Perth Amboy only demonstrated a 16% decline in the same time frame.

Figure 4.38
Percent of Labor Force Unemployed



Source: US Bureau of Labor Statistics; http://www.bls.gov/ro2/countyunemp.htm

Note: Data Represent Unadjusted Annual Averages By Year and Are Not Seasonally Adjusted; Local Area Figures Are Not Available at ZIP Code Level

HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
n/a	n/a	
	2020 TARGET	2020 TARGET RANKINGS BENCHMARK

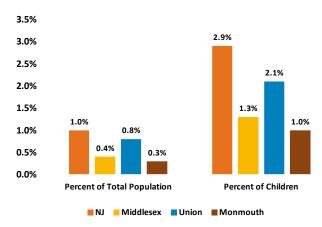
#### Temporary Assistance Needy Families (TANF)

Yellow: Middle Quartiles Green: Best Performing Quartile

In order to qualify for TANF in New Jersey, applicants must comply with all requirements of WorkFirst New Jersey. This includes signing over rights of child support payments, helping to establish paternity of children, cooperating with work requirements and applying for all assistance programs for which a household may be eligible. Additionally, eligible applicants must meet the income and resource guidelines. (http://www.tanfprogram.com/new-jersey-tanf-eligibility)

 As of December 2013, .4% of Middlesex County residents were receiving Work First NJ/TANF benefits, 60% fewer than statewide (1%).  As of December 2013, 1.3% of Middlesex County children were receiving Work First NJ/TANF benefits, 55.2% fewer than statewide (2.9%).

Figure 4.39
Percent of Population Receiving WFNJ/TANF (as of Dec 2013)
WFNJ/TANF Persons, Adults, & Children



Source: NJ Department Of Human Services, Division of Family Development – Current Program Statistics http://www.state.nj.us/humanservices/dfd/news/cps.html

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
TANF RECIPIENTS Percent of Total Population	n/a	n/a	
RED: Procest Performing Quartile			

#### Income

Yellow: Middle Quartiles Green: Best Performing Quartile

Income allows families and individuals to purchase health insurance and medical care, but also provides options for healthy lifestyle choices. While the starkest difference in health is between those with the highest and lowest incomes, this relationship persists throughout all income brackets. (<a href="https://www.countyhealthrankings.org/our-approach/health-factors">www.countyhealthrankings.org/our-approach/health-factors</a>)

- Middlesex County 2012 median household income (\$79,442) exceeded the New Jersey median household income (\$71,637) by \$7,805 or 10.8%.
- Perth Amboy 2012 median household income is \$34,338 (43.2%) less than Middlesex County.

Figure 4.40 Median Household Income (2012\*)

HOUSEHOLD INCOME (2012*)		
GEOGRAPHIC AREA MEDIAN		
New Jersey	\$71,637	
Middlesex County	\$79,442	
RBMC PA	\$73,409	
RBMC OB \$76,08		
08861 Perth Amboy	\$ 45,104	
07008 Carteret	\$ 61,801	
08882 South River	\$ 68,105	
08831 Monroe	\$ 68,577	
08879 South Amboy	\$ 69,938	

<sup>\*</sup>Source: US Census ACS Survey 2012 5 Year Estimates

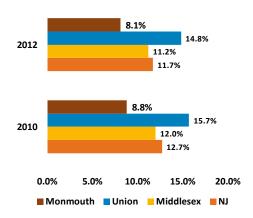
#### **Educational Attainment**

Higher levels of education are linked to better health, healthier lifestyle decisions and fewer chronic conditions. (<a href="www.countyhealthrankings.org/our-approach/health-factors">www.countyhealthrankings.org/our-approach/health-factors</a>) Low educational attainment often signals issues of health literacy and inability to follow medical advice.

- Similar to 2012 statewide statistics, 11.2% of the Middlesex County population did not receive a high school diploma.
- The percent of Middlesex County residents (11.2%) without a high school diploma in 2012 was five times greater than the *Healthy People 2020* target (2.1%).
- In 2012, Perth Amboy (31.1%) had three times the percent of residents with less than a high school education in Middlesex County (11.2%).
- In 2012, Perth Amboy (11.3%) had half the amount of resident college graduates compared to statewide (22.5%).

Figure 4.41

No High School Diploma Trend





Baseline: 11.0% Target: 2.1%

Middlesex County 2012: 11.2%

Source: United States Census 2010 and 2012 5 Year ACS Estimates

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
EDUCATIONAL ATTAINMENT: NO HIGH SCHOOL DIPLOMA Percent of Population (Age 25+)		n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

Figure 4.42

		EDUCATIO	ON LEVEL (2	2012)		
	RBMC PA	RBMC OB	Perth Amboy	Old Bridge	Middlesex County	New Jersey
Less Than Grade 9	7.2%	3.1%	17.9%	2.8%	5.4%	5.5%
Some High School w/o Diploma	7.6%	5.0%	13.2%	5.3%	5.8%	6.2%
High School Grad	33.7%	28.1%	34.7%	28.2%	27.4%	28.7%
Some College/ Associates Degree	24.5%	25.4%	19.3%	28.1%	21.6%	23.3%
Bachelors Degree	18.4%	24.5%	11.3%	23.5%	24.1%	22.5%
Masters/ Professional or Above	8.6%	13.8%	3.6%	12.1%	15.6%	13.8%

<sup>\*</sup>Source: US Census ACS Survey 2012 5 Year Estimates; Population Age 25+

## Limited English Proficiency

- In 2012, according to the U.S. Census, 24.4% more Middlesex County residents over age 5 (16.4%) reported speaking English as "less that very well" than across New Jersey (12.4%).
- Middlesex County experienced a 22% increase in population that reported limited English proficiency between 2000 (13.4%) and 2012 (16.4%).

Figure 4.43 **Limited English Proficiency** 25.0% 20.8% 20.0% 16.6% 16.4% 15.0% 13.4% 12.4% 11.1% 10.0% 7.0% 5.4% 5.0% 0.0% 2000 2012 ■NJ ■ Middlesex ■ Union ■ Monmouth

Source: United States Census 2000, 2012 ACS 5 Year Estimates; Persons Age 5+ reporting speaking English "less than well".

Green: Best Performing Quartile

Table 4.43 (Continued)

INDICATOR	RANKINGS	NEW ERSEY
LIMITED ENGLISH PROFICIENCY (LEP) Percent of Population (Age 5+)	n/a n/a	
RED: Poorest Performing Quartile Yellow: Middle Quartiles		

### Age

Health disparities exist in all age groups. The Centers for Disease Control and Prevention reports that although life expectancy and overall health has improved for most Americans, all older adults are not benefitting equally because of economic status, race and gender.

- In 2012, Monroe (26.2%) had two and a half time the number of people aged 65-84 residing in Middlesex County (10%).
- Between 2012 and 2019, New Jersey is projected to have a 4.5% decline in 0-17 year olds, Perth Amboy, however, anticipates a 2.5% increase in this age cohort.
- Perth Amboy is projected to experience an overall population growth of 5.3%, double the rate of the State (2.9%)
- Women of child-bearing age (15-44) comprised 21.1% of the 2012 population in Middlesex County and are projected to decrease 2.2% in 2019. While women age 15-44 comprise a similar amount of the Perth Amboy population (23.2%), they are projected to decrease 4.4%, double the State.

2012 Population By Age Cohort 40.0% 35.0% 30.0% 25.0% 20.0% 10.0% 5.0% 0.0% 19.2% 26.8% 27.5% 11.6% 2.0% ■ New Jersey Middlesex Cty 18.8% Perth Amboy, NJ (08861) 21.9% 15.7% 30.5% 22.6% 7.7% 1.6% Woodbridge, NJ (07095) 22.9% 9.6% 33.1% 24.4% 7.7% 2.4% 10.5% ■ Monroe, NJ (08831) 14.9% 17.4% 25.1% 26.2% 5.8% Old Bridge, NJ (08857) Edison, NJ (08817) 19.6% 11.9% 33.5% 24.6% 9.1% 1.3% Edison, NJ (08820) 19.4% 11.6% 26.6% 29.1% 11.7% 1.7%

Figure 4.44

Edison, NJ (08837)

Figure 4.45

POPULATION DISTRIBUTION & PROJECTED PERCENT CHANGE '12-'19						
		GEOGRAPHIC AREA				
	New	Middlesex	RBMC	RBMC	Perth	Old
AGE COHORT	Jersey	County	PA	ОВ	Amboy	Bridge
0-17	2,055,648	183,072	58,550	66,120	14,132	9,069
% of Total	23.4%	22.8%	23.5%	22.4%	26.6%	22.7%
% Change '12-'19	-4.5%	-0.2%	0.5%	-3.3%	2.5%	-2.0%
18-44	3,123,947	311,332	95,274	95,923	22,074	14,192
% of Total	35.5%	38.7%	38.3%	32.6%	41.5%	35.5%
% Change '12-'19	-2.0%	-1.8%	-1.8%	0.1%	-2.3%	-2.4%
45-64	2,418,188	210,783	66,794	85,945	12,030	11,959
% of Total	27.5%	26.2%	26.8%	29.2%	22.6%	29.9%
% Change '12-'19	4.1%	9.6%	9.2%	7.2%	13.7%	8.3%
65+	1,196,090	99,079	28,164	46,618	4,907	4,750
% of Total	13.6%	12.3%	11.3%	15.8%	9.2%	11.9%
% Change '12-'19	26.4%	29.5%	27.3%	30.8%	27.4%	43.4%
All Ages	8,793,873	804,266	248,782	294,606	53,143	39,970
% of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Change '12-'19	2.9%	5.4%	5.0%	6.3%	5.3%	6.3%
Women Age 15-44	1,738,914	170,071	51,908	54,306	12,320	7,910
% of Total	19.8%	21.1%	20.9%	18.4%	23.2%	19.8%
% Change '12-'19	-3.3%	-2.2%	-2.7%	-1.3%	-4.4%	-3.5%

#### Race & Ethnicity

Despite notable progress in the overall health of the Nation, there are continuing disparities in the burden of illness and death experienced by blacks or African Americans, Hispanics or Latinos, American Indians and Alaska Natives, and Native Hawaiian and Other Pacific Islanders. Groups currently experiencing poorer health status are expected to grow as a proportion of the total population; therefore, the future health of America as a whole can be influenced by improving the health of these minorities. (http://www.cdc.gov/omhd/AMH/AMH.htm)

- In 2012, 49% of Middlesex County, 76.5% of Monroe and 13.9% of Perth Amboy residents were White.
- In 2012, 17.7% of New Jersey residents and 76.7% of Perth Amboy residents were Hispanic.
- The Hispanic population in Middlesex County increased 46.3% from 2000-2012.
- In 2012, 8% of New Jersey and 21.6% of Middlesex County residents were Asian.
- The Asian population in Middlesex County increased 69% between 2000 and 2012.

2012 Population By Race/Ethnicity 90.0% 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% Black/ African Hispanic/ White Alone American Latino of Any Asian Alone Alone Race ■ New Jersey 59.2% 12.8% 17.7% 8.3% Middlesex Cty 49.0% 9.0% 18.6% 21.6% Perth Amboy, NJ (08861) 13.9% 6.6% 76.7% 1.9% ■ Woodbridge, NJ (07095) 47.8% 9.4% 18.0% 22.6% ■ Monroe, NJ (08831) 12.1% 76.5% 4.5% 5.9% Old Bridge, NJ (08857) 70.1% 5.3% 9.7% 13.7% Edison, NJ (08817) 40.7% 8.9% 11.3% 36.5% Edison, NJ (08820) 33.1% 4.5% 3.2% 57.1% Edison, NJ (08837) 13.6% 32.1% 46.2% 6.5%

Figure 4.46

Figure 4.47

Middlesex County Trends				
RACE / ETHNICITY	2000	2012	% Change	
White (alone)	459,325	393,911	-14.2%	
Black / African American (alone)	63,112	72,151	14.3%	
Asian (alone)	102,749	173,648	69.0%	
Native American / Pacific Islander / Other Race (alone)	3,043	3,303	8.5%	
Two or More Races (alone)	12,256	11,446	-6.6%	
Hispanic / Latino (of Any Race)	102,380	149,807	46.3%	
Total	742,865	804,266	8.3%	

### 2. Access to Care

Access to affordable quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not ensure access. It is also necessary for providers to offer affordable care, be available to treat patients and be in close proximity to patients. (<a href="http://www.countyhealthrankings.org/our-approach/health-factors/access-care">http://www.countyhealthrankings.org/our-approach/health-factors/access-care</a>)

#### Health Insurance

In 2012, over 47 million Americans younger than age 65 were uninsured. The Affordable Care Act (ACA) is projected to extend coverage to some but not all of these people. The uninsured are less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those without insurance are often diagnosed at later, less treatable disease stages than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.

Neighborhoods with low health insurance rates often have fewer providers, hospital beds and emergency resources than areas with higher rates. Even the insured have more difficulty getting care in these areas.

Cost can be a barrier to care even for those who have insurance. In 2009, 17% of people younger than 65 had premium and out of pocket costs totaling more than 10% of family income. Those with private, non-group insurance were three times as likely as those with employer-sponsored insurance to face such costs. (http://www.countyhealthrankings.org/our-approach/health-factors/access-care)

- In 2011, 15% of persons under age 65 living in Middlesex County and New Jersey lacked health insurance.
- In 2011, Middlesex County (15%) had 36% more residents under age 65 without health insurance than the CHR national benchmark (11%).

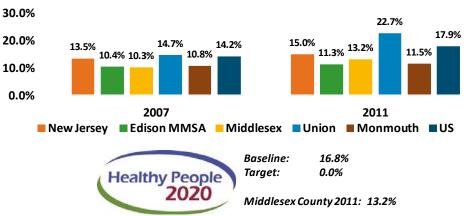
18.0% 18.0% 20.0% 17.0% 15.0% 15.0% 15.0% 15.0% 14.0% 14.0% 15.0% 12.0% 12.0% 12.0% 10.0% 5.0% 0.0% 2009 2011 ■ New Jersey ■ Middlesex ■ Union ■ Monmouth County Health Rankings & Roadmaps Building a Culture of Health, County by County A Robert Wood Johnson Foundation program National Benchmark: 11.0% Middlesex County 2011: 15.0%

Figure 4.48
Percent of Population Under 65 Without Health Insurance

Source: Healthy People 2020 - CDC Behavioral Risk Factor Surveillance System
County Health Rankings - US Census Bureau's Small Area Health Insurance Estimates (SAHIE)

- In 2011, 12% fewer Middlesex County (13.2%) residents reported having any kind of health coverage than statewide (15%).
- Coverage for Middlesex County residents improved 28.1% from 10.3% in 2007 to 13.2% in 2011.
- In 2011, Middlesex County (13.2%) far exceeds the *Healthy People 2020* target of no person without health coverage.
- According to the 2014 Community Health Survey, 19% of Perth Amboy PSA residents lacked health insurance compared to 14% in the Old Bridge Service Area.

Figure 4.49
Health Care Access / Coverage: Do You Have Any Kind of Coverage? (% "NO")



Source: Healthy People 2020 - CDC Behavioral Risk Factor Surveillance System
County Health Rankings - US Census Bureau's Small Area Health Insurance Estimates (SAHIE)

INDICATOR	HEALTHY PEOPLE COUNTY HEALTH NEW 2020 TARGET BENCHMARK JERSEY
HEALTH CARE ACCESS / COVERGE  Do You Have Any Kind of Coverage  No	
RED: Poorest Performing Quartile	

#### Insurance Coverage –Hospitalized Patients

Green: Best Performing Quartile

- 11.7% of Perth Amboy residents receiving inpatient care in 2012 were uninsured compared to 5.7% in Old Bridge, 7.8% in Middlesex County and 8.9% Statewide.
- In 2012, 29.3% of ED visits made by Perth Amboy residents had no insurance compared to 14% in Old Bridge, 22.5% in Middlesex County and 22.8% Statewide.

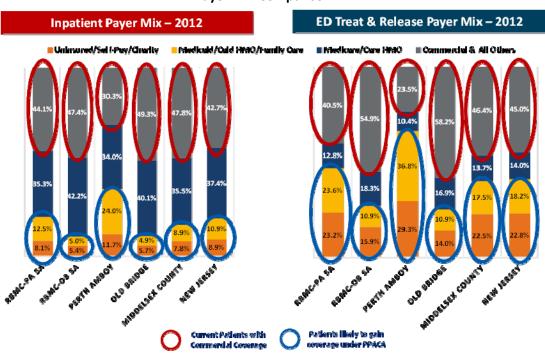


Figure 4.50 Payer Mix Comparison

\*Source: UB-04 2012 Discharges

#### Services

Improving healthcare access depends, in part, on ensuring a standard and consistent source of preventive care. One method to accomplish this is through patient-centered medical homes. Medical homes can transform the delivery of healthcare by improving quality, safety, efficiency and effectiveness and ultimately result in better health outcomes and fewer disparities and costs. (http://pcmh.ahrq.gov/)

Conveniently locating medical homes within a community supports access. Medical homes are associated with greater patient trust, effective communication, increased likelihood to receive appropriate care and decreased duplication and disconnection of services. (http://pcmh.ahrq.gov/)

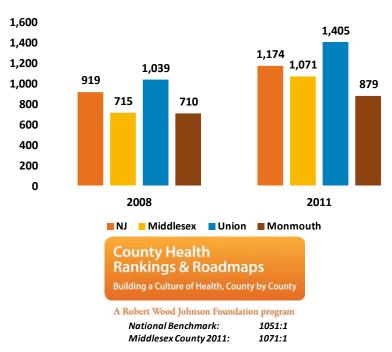
#### **Primary Care Physicians**

Nationally, many areas lack sufficient providers to meet patient needs; as of January 2014, there were about 6,000 primary care, 3,900 mental health and 4,800 dental federally designated Health Professional Shortage Areas in the US. Having a usual primary care provider is associated with a higher likelihood of appropriate care and better outcomes. In 2010, 86% of Americans had a usual source of care, but those with low incomes were less likely to than those with higher incomes, and the uninsured were twice as likely as the insured to lack a usual care source.

(http://www.countyhealthrankings.org/our-approach/health-factors/access-care)

- In 2011, Middlesex County (1071:1) had 8.8% fewer primary care physicians than New Jersey (1174:1).
- Between 2008 and 2011, the number of primary care physicians in Middlesex County increased by over 350 primary care doctors.
- In 2011, Middlesex County (1071:1) exceeded the CHR national benchmark (1051:1) for primary care providers by 20:1.

Figure 4.51
Primary Care Physicians
Ratio of Physicians: 1 Population



Source: Healthy People 2020 - CDC Behavioral Risk Factor Surveillance System

INDICA	ιτOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PRIMARY CARE PHYSICIANS Rate / 100,000 Population		n/a		
RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Best Performing Quartile				

# **Community Health Index**

New Solutions, Inc.'s proprietary Community Health Index (CHI) is a statistical representation of a population's health needs relative to New Jersey and other ZIP Codes. The index ranks a community from 1 to 552, with 1 having the highest need and 552 the least. The CHI incorporates demographic and

socioeconomic factors to numerically represent the health needs of a particular community; CHI includes variables related to poverty, single parent households with children, population speaking a language other than English at home, non-White population, population over age 65, unemployed population, population with less than grade 9 education, rental households, charity/self-pay discharges and Medicaid inpatient discharges.

A comparison of CHI scores to hospital utilization reveals a strong correlation between need and use. Communities with low CHI scores can be expected to have high hospital utilization. There is a causal relationship between CHI scores and preventable hospitalizations and ED visits for manageable conditions. Communities with high CHI scores may have more hospitalization and ED visits that could have been avoided with improved healthy community structures and appropriate outpatient and primary care.

Perth Amboy's CHI score (5/552) indicated highest need in the Combined Service Area followed by Carteret (72), Old Bridge (85), East Brunswick (90) and Monroe (98). Conversely, Helmetta's score (512) represented the lowest need in the Combined Service Ares followed by Port Reading (432), Spotswood (335), Fords (219) and Avenel (154).

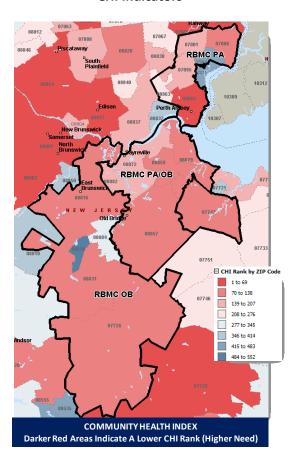


Figure 52 CHI Indicators

# **Timeliness of Service**

A key indicator of the timeliness of service is emergency department (ED) utilization for conditions that could have been treated in a primary care setting.

Reasons for accessing the ED instead of a more appropriate, lower acuity level of care include:

- No regular source of primary care
- Lack of health insurance
- Cost
- Transportation
- Office hours
- Citizenship status

## **ED Utilization for Ambulatory Care Sensitive Conditions**

Ambulatory care sensitive conditions (ACSC) are potentially preventable medical conditions that are treated in the ED. More appropriate care should have been provided in a non-emergent outpatient primary care setting. ED use rates may be reduced by addressing primary care access issues.

- Middlesex ranked 15/21 counties with 52.6/1,000 ACSC ED visits in 2012.
- In 2012, Middlesex County (52.6/1,000) had 15% fewer ASCS ED visits than the State (62.4/1,000).

Figure 4.53
Total ACSC ED Visits Rate/1,000 Population

ACSC - ED Rate/1000		
COUNTY	NJ 2012	
CAMDEN	97.65	
ATLANTIC	92.38	
CUMBERLAND	91.94	
ESSEX	86.84	
SALEM	82.33	
MERCER	75.54	
CAPE MAY	75.25	
PASSAIC	71.40	
OCEAN	70.13	
UNION	68.80	
HUDSON	61.66	

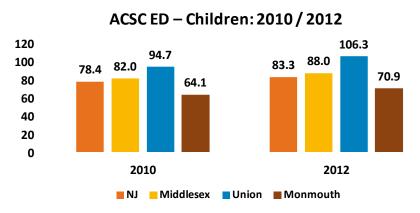
ACSC - ED Rate/1000		
COUNTY	NJ 2012	
BURLINGTON	60.87	
MONMOUTH	59.08	
GLOUCESTER	58.47	
MIDDLESEX	52.65	
WARREN	51.47	
SUSSEX	34.23	
BERGEN	33.23	
SOMERSET	33.18	
MORRIS	33.05	
HUNTERDON	25.20	
STATEWIDE	62.36	

Source: NJDHSS 2012 UB-04 Data — NJ Residents; Population: United States Census 2012 American Community Survey 5yr Estimate

## Children

- In 2012, Middlesex County (88/1,000) had 5.6% more ACSC ED visits for children age 0-17 than statewide (83.3/1,000).
- ED ACSC visits among children in Middlesex County increased 7.3% from 2010 (82/1,000) to 2012 (88/1,000).

Figure 4.54
Total ACSC ED Visits for Children (Age 0-17): Rate/1,000 Population



Source: NJDHSS 2010 - 2012 UB-04 Data — NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

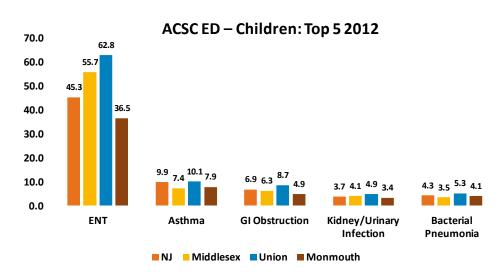
• The 2012 pediatric ED ACSC rate in Perth Amboy (232.0/1,000) was the highest in the Combined Service Area and was more than 2 ½ times the Middlesex County (88/1,000) and New Jersey (83.3/1,000) rates.

Figure 4.55

ED ACSCs - (2012)- PEDIATRIC (Age 0-17)				
GEOGRAPHIC AREA	RATE	HIGHEST SERVICE AREA RATES		
New Jersey	83.30	08861: Perth Amboy 231.96		
Middlesex County	88.00	07008: Carteret 108.36		
RBMC PA	113.25	08882: South River 107.60		
RBMC OB	49.20	07001: Avenel 87.72		
RBMC PA/OB Combined	82.22	08863: Fords 87.15		

- o ENT is the most common ACSC resulting in an ED visit for children.
- o In 2012, 18.7% more Middlesex County children (55.7/1,000) visited the ED for an ENT related ACSC than statewide (45.3/1,000).

Figure 4.56
Total ACSC ED Visits for Children (Age 0-17): Rate/1,000 Population
Top 5 Conditions (2012)



Source: NJDHSS 2010 - 2012 UB-04 Data — NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

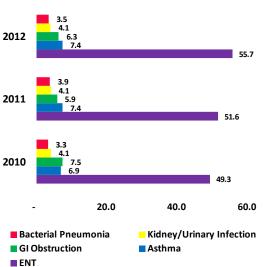
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
TOTAL ACSC ED VISITS FOR CHILDREN (Age 0-17) - ENT Rate / 1,000 Population	n/a	n/a	
RED: Poorest Performing Quartile Yellow: Middle Quartiles			

- o Middlesex County pediatric ACSC ED visits for asthma increased 6.8% between 2010 (6.9/1,000) and 2012 (7.4/1,000).
- Middlesex County pediatric ENT visits increased 13% between 2010 (49.3/1,000) and 2012 (55.7/1,000).

Green: Best Performing Quartile

Figure 4.57

Middlesex County Trend:
2010-2012

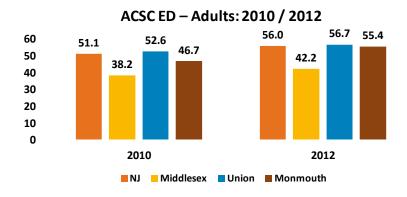


Source: NJDHSS 2010 - 2012 UB-04 Data – NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

## Adults

- The 2012 Middlesex County adult ED ACSC rate (42.2/1,000) was 24.6% lower than the State rate (56/1,000).
- Middlesex County experienced a 10% increase in the adult ED ACSC rate between 2010 and 2012 (38.2/1,000 to 42.2/1,000).

Figure 4.58
Total ACSC ED Visits for Adults (Age 18+): Rate/1,000 Population



Source: NJDHSS 2010 - 2012 UB-04 Data — NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

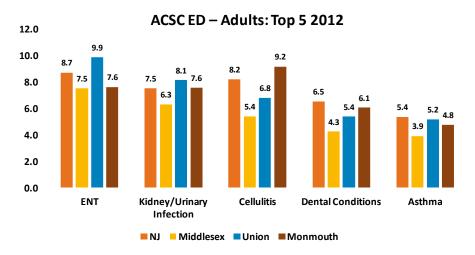
- The 2012 adult ED ACSC rate in Perth Amboy (98.7/1,000) was the highest in the Combined Service Area at more than double the Middlesex County rate (42.4/1,000).
- The 2012 Carteret (63.7/1,000) adult ED ACSC rate was 13.6% higher than the State (57/1,000).

Figure 4.59

ED ACSCs - (2012)- ADULTS (18+)				
GEOGRAPHIC AREA	RATE HIGHEST SERVICE AREA RATES			
New Jersey	56.00	08861: Perth Amboy 98.74		
Middlesex County	42.20	07008: Carteret 63.65		
RBMC PA	55.48	08882: South River 50.50		
RBMC OB	35.87	08879: South Amboy 50.09		
RBMC PA/OB Combined	45.50	07095: Woodbridge 45.24		

- ENT is the leading cause of adult ED ACSC.
- In 2012, 13.8% fewer Middlesex County adults (7.5/1,000) visited the ED for ENT ACSC than the State (8.7/1,000).

Figure 4.60
Total ACSC ED Visits for Adults (Age 18+): Rate/1,000 Population
Top 5 Conditions (2012)



Source: NJDHSS 2010 - 2012 UB-04 Data — NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

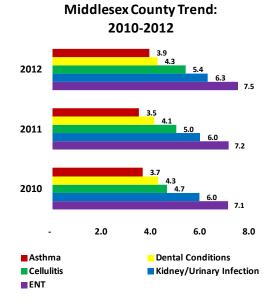
Figure 4.60 (Continued)

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
TOTAL ACSC ED VISITS FOR ADULTS (Age 18+) - CELLULITIS Rate/1,000 Population	n/a	n/a	
TOTAL ACSC ED VISITS FOR ADULTS (Age 18+) - DENTAL CONDITIONS Rate/1,000 Population	n/a	n/a	
TOTAL ACSC ED VISITS FOR ADULTS (Age 18+) - ASTHMA Rate/1,000 Population	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

- Emergency department visits within Middlesex County increased slightly for four out of five Top 5 adult ACSC between 2010 and 2012.
- Adult ED visits for cellulitis in Middlesex County had the greatest increase of the top 5 (15%) from 2010 (4/7/1,000) to 2012 (5.4/1000).

Figure 4.61
Total ACSC ED Visits for Adults (Age 18+): Rate/1,000 Population
Top 5 Conditions (2012)



Source: NJDHSS 2010 - 2012 UB-04 Data — NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

#### **Inpatient Utilization for Ambulatory Care Sensitive Conditions**

Individuals may be admitted to the hospital due to an ACSC. Higher rates of ACSC conditions among inpatients can indicate primary care access issues, poor preventive care and barriers related to socioeconomic status.

- Middlesex ranked 16 of 21 counties with 18.2/1,000 ACSC Inpatient admissions in 2012.
- In 2012, Middlesex County (18.2/1,000) had 13.6% fewer ASCS Inpatient admissions than the State (21.1/1,000).

Figure 4.62 Total ACSC IP Admissions – Rate/1,000 Population

ACSC - IP Rate/1000		ACSC - IP Rate/1000		
ı	COUNTY	NJ 2012	COUNTY	NJ 2012
	OCEAN	28.27	MERCER	21.35
	CAPE MAY	27.88	BURLINGTON	21.10
ĺ	CAMDEN	25.72	MONMOUTH	20.28
ĺ	CUMBERLAND	25.45	SUSSEX	18.23
ĺ	HUDSON	25.09	MIDDLESEX	18.21
ĺ	ATLANTIC	24.94	UNION	17.64
ĺ	SALEM	24.56	BERGEN	16.17
ĺ	ESSEX	23.99	MORRIS	15.19
i	WARREN	22.33	SOMERSET	14.51
i	PASSAIC	22.33	HUNTERDON	14.02
i	GLOUCESTER	22.08	STATEWIDE	21.08
	GLOGGESTER	00		

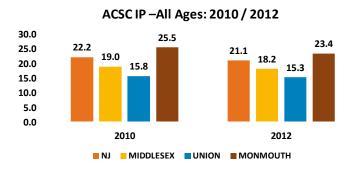
NJ 2012 21.35 RCER NGTON 21.10 **HTUON** 20.28 SEX 18.23 LESEX 18.21 ION 17.64 GEN 16.17 RRIS 15.19 **ERSET** 14.51 **ERDON** 14.02 EWIDE 21.08

Source:

NJDHSS 2012 UB-04 Data - NJ Residents; Population: United States Census 2012 American Community Survey 5yr Estimate

Middlesex County Inpatient admissions resulting from ACSC declined 4.2% from 19/1,000 in 2010 to 18.2/1,000 in 2012.

Figure 4.63 **Total ACSC IP Admissions** Rate / 1,000 Population



Source: NJDHSS 2010 - 2012 UB-04 Data - NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

Figure 4.63 (Continued)

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
OVERALL ACSC INPATIENT ADMISSIONS Rate / 1,000 Population	n/a	n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

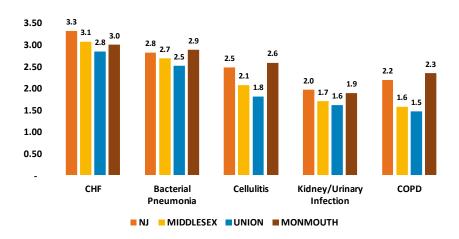
- In 2012, Spotswood (29.2/1,000), Monroe (28.7/1,000), and Perth Amboy (26.2) have the highest Combined Service Area rates of inpatient admissions due to ACSC.
- The 2012 Inpatient ACSC for Spotswood (29.2/1,000) was 38.6% higher than the State rate (21.1/1,000).
- The 2012 inpatient ACSC for Monroe (28.7/1,000) was 35.9% higher than New Jersey's rate.

Figure 4.64

IP ACSCs - (2012)- ALL AGES					
GEOGRAPHIC AREA	RATE	RATE HIGHEST SERVICE AREA RATES			
New Jersey	21.08	08884: Spotswood 29.22			
Middlesex County	18.21	08831: Monroe 28.65			
RBMC PA	21.44	08861: Perth Amboy 26.23			
RBMC OB	20.68	08879: South Amboy 25.76			
RBMC PA/OB Combined	21.16	07747: Matawan 22.66			

- CHF is the leading cause of inpatient ACSC admissions in New Jersey and Middlesex County.
- 2012 Middlesex County inpatient ACSC rates for the top 5 were all lower than State rates.

Figure 4.65
ACSC Inpatient Admissions By Top 5 Conditions
Rate / 1,000 Population



Source: NJDHSS 2010 - 2012 UB-04 Data – NJ Residents; Population: United States Census (2010), American Community Survey 5yr Estimate (2012); Straight Line 2010-2012 (2011)

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
ACSC IP ADMISSIONS – BACTERIAL PNEUMONIA Rate/1,000 Population	n/a	n/a	
ACSC IP ADMISSIONS – CELLULITIS Rate/1,000 Population	n/a	n/a	
ACSC IP ADMISSIONS – KIDNEY / URINARY INFECTION Rate / 1,000 Population	n/a	n/a	
ACSC IP ADMISSIONS – COPD Rate / 1,000 Population	n/a	n/a	

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

## Self Pay/Charity Care/Underinsured ED and IP Discharges

There is a high correlation between ACSC use rates and the percent of self-pay/charity care/underinsured patients using the emergency department.

- In 2012, Middlesex County (17.6%) had 4% fewer self-pay/charity care/underinsured persons than statewide (18.4%).
- In 2012, Perth Amboy had the highest rate of self-pay/charity care/underinsured patients (25.1%) in the Combined Service Area, 42.6% greater than in Middlesex County (17.6%).

Figure 4.66

% SELF PAY/CHARITY CARE/UNDERINSURED- (2012) (ED & IP)				
GEOGRAPHIC AREA	RATE HIGHEST SERVICE AREA RATES			
New Jersey	18.4%	08861: Perth Amboy 25.1%		
Middlesex County	17.6%	08882: South River 22.6%		
RBMC PA	18.4%	07008: Carteret 19.4%		
RBMC OB	11.7%	08872: Sayreville 16.5%		
RBMC PA/OB Combined	15.2%	08879: South Amboy 15.7%		

## 3. <u>Clinical Care Measures</u>

## Inpatient and ED Utilization

Utilization is impacted by policy change, advances in technology, practice patterns and demographics. It is anticipated that health care reform will improve care transitions, coordination of care, enhance ambulatory care and improve access to primary care and result in a decline of inpatient and ED utilization.

#### Inpatient

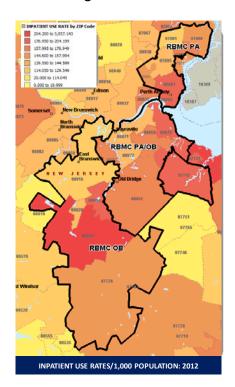
- Middlesex County 2012 inpatient utilization rates (144/1,000) were 9% lower than the State (158.3/1,000).
- Raritan Bay Medical Center's 2012 Service Area inpatient rates (164.3/1,000) were 14.1% higher than Middlesex County rates.
- Monroe Township's (215.1/1,000) older population drives an inpatient use rate, 49% higher than Middlesex County (144/1,000) in 2012.

Figure 4.67

INPATIENT USE RATES (2012)		
GEOGRAPHIC AREA RATE		
New Jersey	158.26	
Middlesex County	144.00	
RBMC PA	161.04	
RBMC OB	166.22	
RBMC PA/OB Combined	164.30	
08831: Monroe	215.05	
07747: Matawan 192.19		
08884: Spotswood	188.22	
08861: Perth Amboy	183.32	
08879: South Amboy	181.11	

Source: UB-04 2012 Discharges Includes Inpatient & Same Day Stay, Excludes Normal Newborn; Population – US Census ACS 2012 5yr Estimate

Figure 4.68



## Emergency Department

- Middlesex County's 2012 ED use rates (285.2/1,000) were 17% less than State rates (343.4/1,000).
- Raritan Bay Medical Center's 2012 Combined Service Area (301.9/1,000) ED use rate exceeded Middlesex County by 5.9%.
- In 2012 Perth Amboy's ED use rates (592.5/1,000) were more than double Middlesex County rates.
- In 2012, Carteret's ED use rates (359.6/1,000) were 26% greater than Middlesex County.

Figure 4.69

ED USE RATES (2012)			
GEOGRAPHIC AREA	RATE		
New Jersey	343.40		
Middlesex County	285.20		
RBMC PA	352.41		
<b>RBMC OB</b>	251.92		
RBMC PA/OB Combined	301.90		
08861: Perth Amboy	592.51		
07008: Carteret	359.59		
08882: South River	344.23		
08879: South Amboy	304.23		
07064: Port Reading	303.84		

<sup>\*</sup>Source: UB-04 2012 ED Discharges; US Census ACS 2012 5yr Estimate

<sup>\*\*</sup> Emergency Room Use Among Adults Aged 18–64: Early Release of Estimates From the National Health Interview Survey, January–June 2011; http://www.cdc.gov/nchs/data/nhis/earlyrelease/emergency\_room\_use\_january-june\_2011.pdf

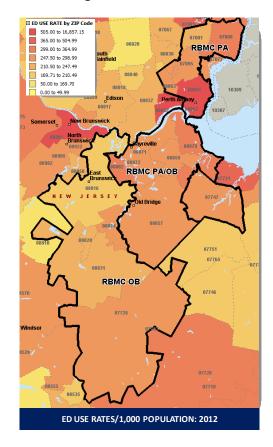


Figure 4.70

#### **Cesarean Section**

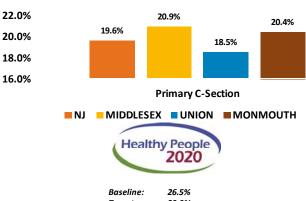
A Cesarean section (C-section) is a major surgical procedure in which the infant is delivered through the mother's abdomen. An emergent C-section is performed as a result of health problems in the mother, position of the baby and/or distress in the infant.

(http://www.nlm.nih.gov/medlineplus/cesareansection.html)

The U.S. cesarean delivery rate reached a high of 32.9% of all births in 2009, rising 60% from 1996 (20.7%). Recently, the American College of Obstetricians and Gynecologists developed clinical guidelines for reducing the occurrence of non-medically indicated cesarean delivery and labor induction prior to 39 weeks. Efforts to reduce such births include initiatives to improve perinatal care quality, changes in hospital policy to disallow elective delivery prior to 39 weeks and education of the public. The total cesarean delivery rate declined in 2010 to 32.8% and was stable for 2011 and 2012. (http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63 01.pdf)

- The 2010 Middlesex County's Primary C-section rate (20.9%) was 6% greater than the State rate (19.6%).
- The 2010 Middlesex County Primary C-section rate was 12.6% better than the *Healthy People* 2020 target 23.9%.

Figure 4.71
Primary C-Section Rates\* (2010)



Target: 23.9%
Middlesex County 2010: 20.9%

Source: NJDOH Bureau of Vital Statistics and Registration, NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/ BirthBirthCnty/Count.html

\*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PRIMARY C-SECTION RATE  Single >= 37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females		n/a	

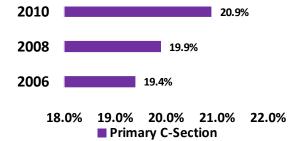
RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

 The Middlesex County primary C-section rate increased slightly from 19.4% in 2006 to 20.9% in 2010.

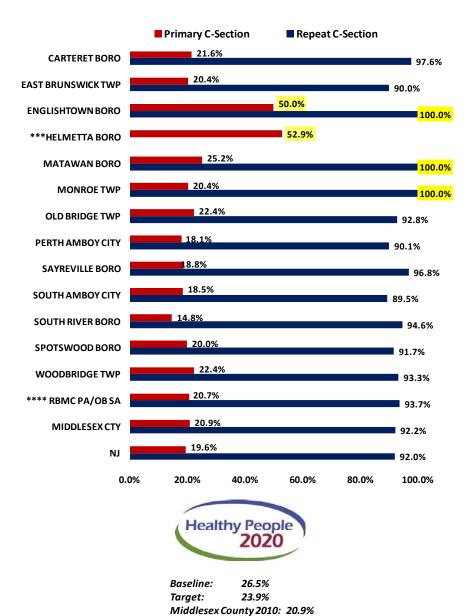
Figure 4.72
Primary C-Section Rates\* (2010)
Middlesex County Trend



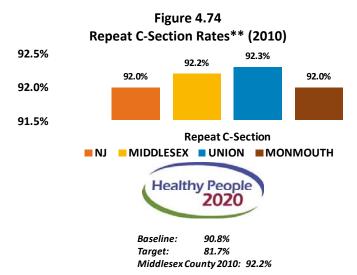
Source: NJDOH Bureau of Vital Statistics and Registration, NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html
\*Primary C-Section: Single >=37 Week Low Risk Births Delivered By C-Section/Single Live Births To Low Risk Females

- In 2010, primary C-section rates in Englishtown (50%) and Helmetta (52.9%) far exceeded Middlesex County (20.9%), New Jersey (19.6%) and *Healthy People 2020* target (23.9%) rates.
- Englishtown, Matawan and Monroe had 100% repeat C-section rates in 2010.

Figure 4.73 C-Section Rates (2010)



• The Middlesex County 2010 repeat C-section rate (92.2%) is 12.9% higher than the *Healthy People 2020* target (81.7%).



Source: NJDOH Bureau of Vital Statistics and Registration, NJ Birth Certificate Database <a href="http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html">http://www4.state.nj.us/dhss-shad/query/result/birthBirthCnty/Count.html</a>

<sup>\*\*</sup>Repeat C-Section: Single >=37 Week Low Risk Births Delivered By C-Section With Prior Cesarean/Live Births To Low Risk Females With A Prior Cesarean

HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
	n/a	
		2020 TARGET BENCHMARK

## 4. Health Behaviors

Green: Best Performing Quartile

# Maternal / Fetal Health

#### Prenatal Care

The medical care a woman receives during pregnancy monitors her health and the developing fetus. Low-risk pregnancies should visit the prenatal provider every four or six weeks through 28 weeks then every two or three weeks from weeks 28-36 and finally every week in the ninth month until delivery. A high-risk pregnancy will require additional visits. (<a href="http://www.plannedparenthood.org/health-info/pregnancy/prenatal-care">http://www.plannedparenthood.org/health-info/pregnancy/prenatal-care</a>) Pregnant women who do not receive adequate prenatal care risk undetected complications and increased possibility of adverse outcomes.

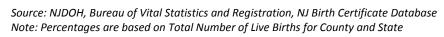
Early and regular prenatal care is a strategy to improve health outcomes for mothers and infants. Two of the most significant benefits are improved birth weight and decreased risk of preterm delivery. According to the March of Dimes Foundation, the average cost of medical care for a premature or low birth-weight baby for its first year of life is approximately \$49,000 compared to a newborn without complications which costs \$4,551. Infants born to mothers who received no prenatal care have an infant mortality rate five times that of mothers who received appropriate prenatal care in the first trimester of pregnancy.

Enrollment in care during the first trimester of pregnancy is a reflection of timely initiation of prenatal care. (http://www.hrsa.gov/quality/toolbox/measures/prenatalfirsttrimester/index.html)

- In 2010, 9.7% more Middlesex County (86.1%) women entered prenatal care in the first trimester than in New Jersey (78.5%).
- 6.7% more Middlesex County women enrolled in first trimester prenatal care 2010 (86.1%) than in 2006 (80.7%).
- In 2010, Middlesex County women exceeded the *Healthy People 2020* target 77.9% women enrolled in first trimester care by 10.5%.

100.0% 86.1% 90.0% 84.6% 83.3% 81.9% 80.7% 78.5% 78.5% 78.6% 75.6% 80.0% 74.1% 73.4% 71.5% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 2006 2008 2010

Figure 4.75
Percentage of Live Births With First Trimester Prenatal Care



Healthy People 2020

New Jersey Middlesex Union Monmouth

Baseline: 70.8%

Taraet: 77.9%

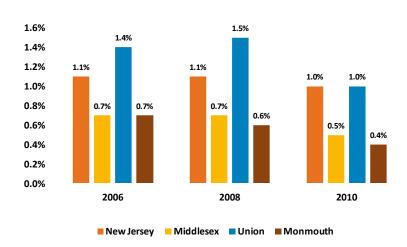
Middlesex County 2010: 86.1%



RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

- The percent of Middlesex County women without prenatal care decreased 28.6% from .7% in 2006 to .5% in 2010.
- The Middlesex County rate of women not entered into prenatal care in 2010 is half the State rate of 1%.

Figure 4.76
Percentage of Live Births With No Prenatal Care



Source: NJDOH, Bureau of Vital Statistics and Registration, NJ Birth Certificate Database Note: Percentages are based on Total Number of Live Births for County and State

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
NO PRENATAL CARE Percentage of Live Births	n/a	n/a	
RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Best Performing Quartile			

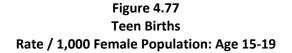
#### **High Risk Sexual Behaviors**

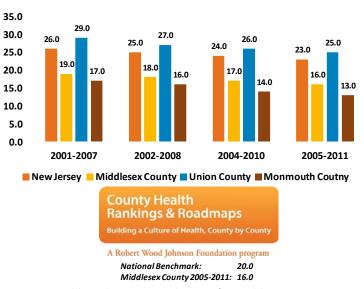
## Teen Pregnancy

In 2013, there were 26.6 births for every 1,000 adolescent females ages 15-19, or 274,641 babies born to females in this age group. Nearly eighty-nine percent of these births occurred outside of marriage. The 2013 teen birth rate indicates a decline of ten percent from 2012 when the birth rate was 29.4 per 1,000. The teen birth rate has declined almost continuously over the past 20 years. In 1991, the U.S. teen birth rate was 61.8 births for every 1,000 adolescent females, compared with 26.6 births for every 1,000 adolescent females in 2013. Still, the U.S. teen birth rate is higher than that of many other developed countries, including Canada and the United Kingdom. (http://www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/teen-

pregnancy/trends.html) Pregnant teens are less likely than older women to receive recommended prenatal care and are more likely to have pre-term or low birth weight babies. Teen mothers are often at increased risk for STIs and repeat pregnancies, are less likely than their peers to complete high school and more likely to live below the poverty level and rely on public assistance. Risky sexual behaviors can have high economic costs for communities and individuals. (<a href="http://www.countyhealthrankings.org/our-approach/health-factors/sexual-activity">http://www.countyhealthrankings.org/our-approach/health-factors/sexual-activity</a>)

- The 2006-2011 Middlesex County teen birth rate (aged 15-19) was 30% better than the State rate (23/1,000).
- The 2006-2011 Middlesex County teen birth rate (aged 15-19) was 20% better than the CHR benchmark (20/1,000).
- Teen birth rates among Middlesex County women aged 15-19 have improved 15.8% from 19/1,000 in 2001-2007 to 16/1,000 in 2005-2011.





Source: Age 15-19 - County Health Rankings, National Center for Health Statistics; Age 15-17- NJDOH Center for Health Statistics, State Health Assessment Data

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
TEEN BIRTHS – AGES 15-19 Rate/1,000 Female Population	n/a	n/a	
TEEN BIRTHS – AGES 15-17 Rate / 1,000 Female Population		n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

In a 2010 National Center Health Statistics data brief, *State Disparities in Teenage Birth Rates in the United States*, based upon 2008 data, New Jersey was reported as one of 10 states with the lowest teen birth rates (24.5/1,000) compared to National figures (41.5/1,000). However, the New Jersey rate showed tremendous variability when examined by race and ethnicity. Among White, non-Hispanics the rate was 8.5/1,000 compared to Black, non-Hispanics 50.2/1,000 and Hispanics (any race) 65.7/1,000. (http://www.cdc.gov/nchs/data/databriefs/db46.pdf)

• 2012 Birth rate to teens age 15-19 in Perth Amboy (56.8/1,000) was four times the Middlesex County rate (13.8/1,000).

**TEEN BIRTH RATES/1,000 (2012) GEOGRAPHIC AREA** 16.16 **New Jersey Middlesex County** 13.81 23.48 **RBMC PA RBMC OB** 6.03 RBMC PA/OB Combined 14.60 56.75 08861: Perth Ambov 18.72 07095: Woodbridge 18.17 07064: Port Reading 17.79 07008: Carteret 16.86 08872: Sayreville

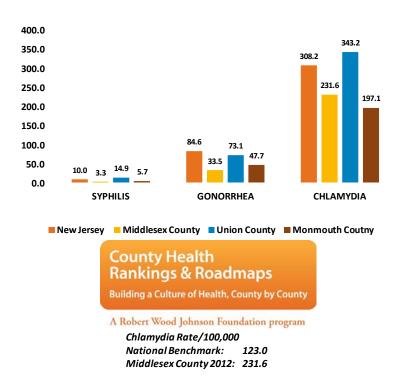
Figure 4.78

#### Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) are infections contracted through relations with an individual who has the infection. STDs are caused by bacteria, parasites and viruses. There are more than 20 types of STDs, including Chlamydia, Gonorrhea, Genital herpes, HIV/AIDS, HPV, Syphilis and Trichomoniasis. Most STDs affect both men and women, but in many cases the health problems they cause can be more severe for women. If a pregnant woman has an STD, it can cause serious health problems for the baby. (http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html)

- Chlamydia is the most prevalent reported STI. From 2010-2012, Middlesex County (231.6/1,000) had 24.9% fewer cases of Chlamydia than New Jersey (308.2/1,000).
- The rate of Chlamydia in Middlesex County (231.6/1,000) was almost double the CHR national benchmark (123/100,000).
- From 2010-2012, Middlesex County (3.3/100,000) had 67% fewer cases of syphilis than New Jersey (10/100,000).
- From 2010-2012, Middlesex County (33.5/100,000) had 60.4% fewer cases of gonorrhea than New Jersey (84.6/100,000).

Figure 4.79
Sexually Transmitted Diseases
Rate / 100,000 Population



Source: NJDOH, Division of HIV, STD and TB Services, Sexually Transmitted Diseases Program; Rates Based on NJDOH Actuals By Year and Claritas Population Data (2010-2012)

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
STDs: CHLAMYDIA Rate/100,000 Population	n/a		
STDs: SYPHILLIS Rate / 100,000 Population	n/a	n/a	

RED: Poorest Performing Quartile

Yellow: Middle Quartiles

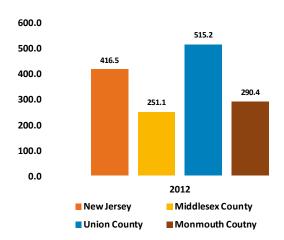
Green: Best Performing Quartile

# HIV/AIDS

Approximately 50,000 new HIV infections occur in the United States each year. HIV is spread mainly by having sex with someone who has HIV or sharing needles with someone positive.

• In 2012, HIV/AIDS was 40% less prevalent in Middlesex County (251.1/100,000) than in New Jersey (416.5/100,000).

Figure 4.80 HIV / AIDS Prevalence Rate / 100,000 Population



Source: NJDOH, Division of HIV, STD and TB Services, HIV/AIDS Reporting System;

http://www.state.nj.us/health/aids/repa/aidsdata.shtml

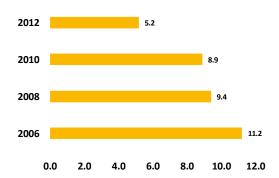
Note: Prevalence Indicates Number of People Living With HIV/AIDS At The Time; Percentages By Race /

Ethnicity Exclude "Other" and Do Not Total 100%

 Similar to the State, new cases of HIV/AIDS reported in Middlesex County are trending downward. In 2006 Middlesex County reported 11.2/100,000 new cases and 5.2/100,000 new cases in 2012.

Figure 4.81
HIV / AIDS: New Cases Reported
Rate / 100,000 Population

## **Middlesex County Trend**



 $Source: NJDOH, \ Division \ of \ HIV, \ STD \ and \ TB \ Services, \ HIV/AIDS \ Reporting \ System;$ 

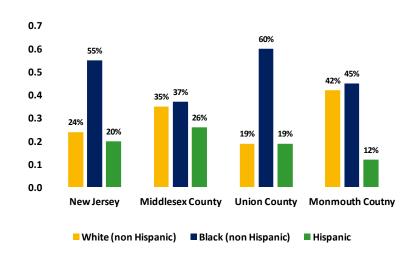
http://www.state.nj.us/health/aids/repa/aidsdata.shtml

Note: New Cases Reported Indicates New Cases Per Year – Number of Cases Reported As of December 31,

2012 By Year of Diagnosis; Claritas Population Data (2010-2012)

In Middlesex County, HIV/AIDS is relatively evenly distributed across race and ethnicity, 35% White, 38% Black and 26% Hispanic as compared to the State in which 55% of those infected are Black, 24% are White and 20% are Hispanic.

Figure 4.82
HIV / AIDS Prevalence
Percent of Prevalence By Race / Ethnicity



Source: NJDOH, Division of HIV, STD and TB Services, HIV/AIDS Reporting System; http://www.state.nj.us/health/aids/repa/aidsdata.shtml

Note: Prevalence Indicates Number of People Living With HIV/AIDS At The Time; Percentages By

Race / Ethnicity Exclude "Other" and Do Not Total 100%

#### **Individual Behavior**

A CDC report indicates that people can live longer if they practice one or more healthy lifestyle behaviors including: eating a healthy diet, not smoking, regular exercise and limiting alcohol consumption. People who engaged in all of these behaviors were 66 percent less likely to die early from cardiovascular disease and 57 percent less likely to die early from other causes compared to those who did not engage in any of these behaviors. (http://www.cdc.gov/features/livelonger/)

#### Tobacco Use

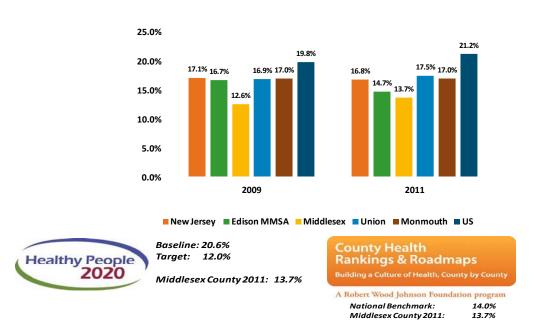
Tobacco use is the leading cause of preventable death in the United States. Smoking causes cancer, heart disease, stroke, diabetes, and lung diseases such as emphysema, bronchitis, and chronic airway obstruction, and can lead to lung cancer and heart disease in those exposed to secondhand smoke. Each year, smoking kills 480,000 Americans, including 42,000 from exposure to secondhand smoke. On average, smokers die 10 years earlier than nonsmokers. It costs the nation about \$133 billion annually to treat tobacco-related illnesses.

About 18% of adults smoke. Each day, nearly 3,200 youth smoke their first cigarette, and 2,100 people transition from occasional to daily smokers. Smokeless tobacco can also lead to various cancers, gum and teeth problems, and nicotine addiction. Almost 6% of young adults use smokeless tobacco and half

of new users are younger than 18. (<a href="http://www.countyhealthrankings.org/our-approach/health-factors/tobacco-use">http://www.countyhealthrankings.org/our-approach/health-factors/tobacco-use</a>)

- In 2011, there were 18.5% fewer smokers in Middlesex County (13.7%) than in New Jersey (16.8%).
- Middlesex County smokers steadily increased from 12.6% in 2009 to 13.7% in 2011 despite a statewide decrease in this time frame from 17.1% to 16.8%.
- In 2011, Middlesex County exceeded the *Healthy People 2020* target of 12% of adults that smoke by 14.2%.
- In 2011, Middlesex County had .3 percentage points fewer smokers than the CHR national benchmark of 14%.

Figure 4.83
Tobacco Use
Adults Who Are Current Smokers



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS)

Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDIC	TOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
TOBACCO USE: Adults Who Are Current Smokers				
RED: Poorest Performing Quartile Yellow: Middle Quartiles				
Green: Past Parforming Quartile				

#### Alcohol Use

Although moderate alcohol use is associated with reduced risk of heart disease and diabetes, excessive consumption is the third leading cause of preventable death in the US. Excessive consumption considers

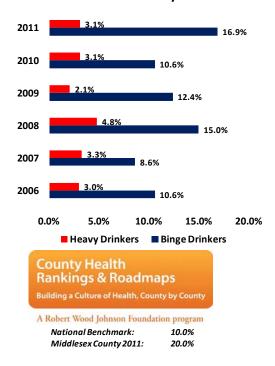
both the amount of alcohol and the frequency of drinking. Short-term, excessive drinking is linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, failure to fulfill responsibilities and motor vehicle crashes. Over time, excessive alcohol consumption is a risk factor for hypertension, acute myocardial infarction, fetal alcohol syndrome, liver disease and certain cancers.

(http://www.countyhealthrankings.org/our-approach/health-factors/alcohol-drug-use)

- In 2011, 20% of Middlesex County residents were either heavy drinkers or binge drinkers compared to 24.2% statewide.
- The 2011 number of Middlesex County (20%) residents who drank excessively was double the CHR national benchmark (10%).
- Binge drinkers, those men that consumed more than 5 drinks and women that consumed more than 4 drinks in one occasion, increased 37.3% from 2006 (10.6%) to 2011 (16.9%).

Figure 4.84
Excessive Drinking
Heavy Drinkers Plus Binge Drinkers

### **Middlesex County Trend**



Source: CDC Behavioral Risk Factor Surveillance System

Note: Heavy Drinkers Are Defined As Adult Men Who Have More Than 2 Drinks Per Day and Adult Women Who Have More Than One Drink Per Day. Binge Drinkers Are Defined As Adult Men Who Have 5 or More Drinks On One Occasion and Females Who Have 4 or More Drinks On One Occasion.



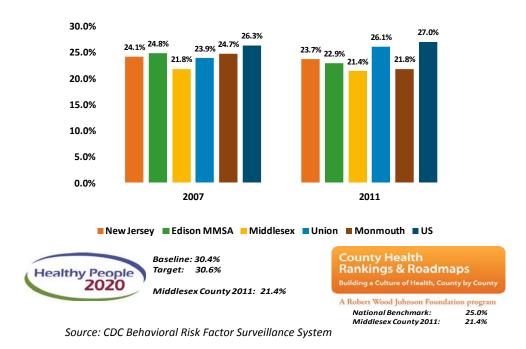
#### Diet

Healthy food is a key component to good health; insufficient nutrition hinders growth and development. As of 2013, 29 million Americans were unable to access to affordable, healthy food. Those with lower education levels, already at-risk for poor health outcomes, frequently live in food deserts.

Excessive calorie consumption leads to obesity, especially when paired with too little physical activity. Obesity is one of the biggest drivers of preventable chronic diseases in the US. Being overweight or obese increases the risk for type 2 diabetes, heart disease, stroke, hypertension, cancer, Alzheimer's disease, dementia, liver disease, kidney disease, osteoarthritis and respiratory problems. (http://www.countyhealthrankings.org/our-approach/health-factors/diet-and-exercise)

- In 2011, there were 9.7% fewer Middlesex County residents (21.4%) with a Body Mass Index (BMI) >=30 than New Jersey residents overall (23.7%).
- In 2011, 30.1% less Middlesex County residents (21.4%) were obese than the *Healthy People* 2020 target (30.6%)
- In 2011, 14.4% less Middlesex County residents (21.4%) had a BMI>=30 than the CHR national benchmark (25%).

Figure 4.85
Obesity
Percent With Reported BMI >=30



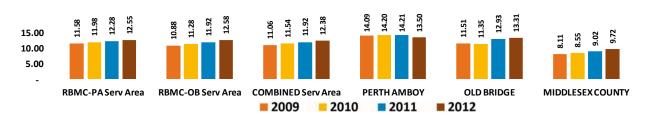
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
OBESITY Percent With Reported BMI >= 30			

3/9/2015

Yellow: Middle Quartiles
Green: Best Performing Quartile

- 2012 Hospital utilization rates among obese patients were highest in the City of Perth Amboy at 13.5/1,000 compared to 9.7/1,000 in Middlesex County.
- Between 2009 and 2012 hospital utilization rates for obese patients were much higher in the RBMC-PA Service Area, RBMC-OB Service Area, Combined Service Area, Perth Amboy and Old Bridge than in Middlesex County overall.

Figure 4.86
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population
Obesity



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes 278.00 or 278.01 (Appearing Anywhere In First 13 DX Codes On Patient Record)

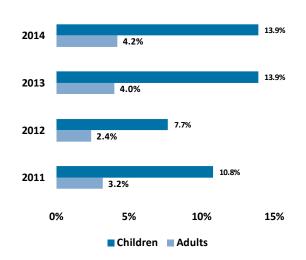
# Supplemental Nutrition Assistance Program (SNAP)

SNAP offers nutrition assistance to millions of eligible, low-income individuals and families. The Food and Nutrition Service works with State agencies, nutrition educators and neighborhood and faith-based organizations to ensure that those eligible for nutrition assistance make informed decisions and access benefits. (http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap)

- In 2014, 31.1% fewer Middlesex County children (13.9%) were utilizing the SNAP benefits than children Statewide (20.2%).
- In 2014, 35.4% fewer Middlesex County adults (4.2%) were receiving SNAP than throughout the State (6.5%).
- Between 2011 and 2014, an additional 31.1% of Middlesex County adults and 28.7% of children received SNAP.

Figure 4.87
Percent of Population Receiving SNAP (2014)

# **Middlesex County Trend**



Source: State of New Jersey, Department of Human Services, Division of Family Development

Note: Percentages Are For February of Each Year and Based on NJDHS Actuals By Year and Claritas

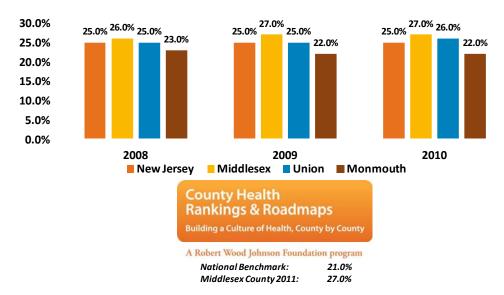
Population Data (2010-2014)

#### Exercise

Inadequate physical activity contributes to increased risk of coronary heart disease, diabetes and some cancers. Nationally, half of adults and nearly three-quarters of high school students do not meet the CDC's recommend physical activity levels. (<a href="http://www.county.healthrankings.org/our-approach/health-factors/diet-and-exercise">http://www.county.healthrankings.org/our-approach/health-factors/diet-and-exercise</a>)

- In 2010, 8% more Middlesex County adults (27%) reported no leisure-time physical activity than adults throughout the State (25%).
- 28.6% more Middlesex County adults over age 20 indicated no leisure-time physical activity (27%) than the CHR national benchmark (21%).

Figure 4.88
Percent of Adults Age 20+ Reporting No Leisure-Time Physical Activity



Source: County Health Rankings – National Center For Chronic Disease Prevention and Health Promotion CDC Behavioral Risk Factor Surveillance System

	020 TARGET	BENCHMARK	JERSEY
EXERCISE: ADULTS Percent of Adults Age 20+ Reporting No Leisure-Time Physical Activity	n/a		

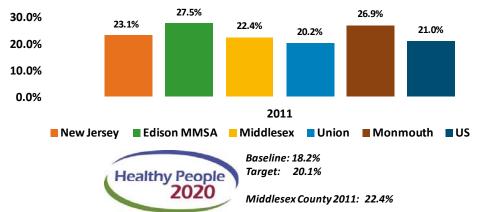
RED: Poorest Performing Quartile

Yellow: Middle Quartiles

Green: Best Performing Quartile

- In 2011, .7% fewer Middlesex County residents (22.4%) participated in enough aerobic and muscle strengthening exercises to meet guidelines than New Jersey residents (23.1%).
- In 2011, Middlesex County (22.4%) had 11.4% more residents who met standards for aerobic and strength training than *Healthy People 2020* target (20.1%).

Figure 4.89
Participation in Enough Aerobic and Muscle Strengthening Exercises to Meet Guidelines



Source: County Health Rankings – National Center For Chronic Disease Prevention and Health Promotion CDC Behavioral Risk Factor Surveillance System

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PHYSICAL ACTIVITIES Participation In Enough Aerobic and Muscle Strengthening Exercises To Meet Guidelines		n/a	
Participation In Enough Aerobic and Muscle Strengthening Exercises To Meet Guidelines  RED: Poorest Performing Quartile		, a	

Yellow: Middle Quartiles Green: Best Performing Quartile

# **Health Screenings**

Screening tests can detect disease and conditions in early stages, when they may be easier to treat.

#### **Cancer Screening**

# Breast Cancer (mammography)

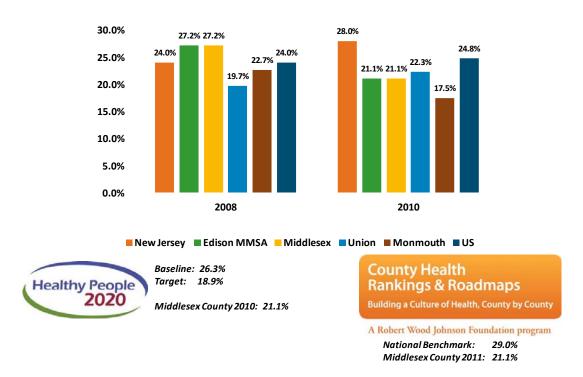
Mammograms are recommended for women every 1 to 2 years starting at age 40.

- In 2010, 25% fewer Middlesex County women over age 40 (21.1%) did not have a mammography within the past two years than statewide (28%).
- 6.1% fewer Middlesex County women went without a mammography in the last two years in 2010 (21.2%) than in 2008 (27.2%).
- In 2010, 27.2% fewer Middlesex County women (21.1%) went without a mammogram in the last two years than the CHR national benchmark for noncompliance (29%).
- In 2010, 11.6% more Middlesex County women (21.1%) went without a mammogram in the last two years than the *Healthy People 2020* target for noncompliance (18.9%).

Figure 4.90

Mammography: Percent of Women Age 40+

Who Have Not Had a Mammogram within the Past Two Years



INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
MAMMOGRAMS Women Age 40+ Who Have NOT Had a Mammogram Within Past Two Years %No			
RED: Poorest Performing Quartile  Yellow: Middle Quartiles			

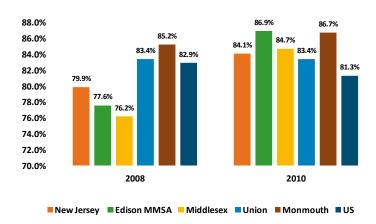
## Cervical Cancer (pap smear)

Green: Best Performing Quartile

Pap Smears are recommended every 1 to 3 years for sexually active women and women over age 21.

- In 2010, 84% of Middlesex County (84.7%) and New Jersey (84.1%) women over age 18 had a pap smear within the past three years.
- In 2010, 11.1% more Middlesex County women (84.7%) had a pap test within the past 3 years than in 2008 (76.2%).

Figure 4.91
Pap Test
Percent of Women Age 18+ Who Have Had a Pap Test In the Past 3 Years



## Colon-rectal Cancer (sigmoidoscopy or colonoscopy)

Colorectal cancer screenings are recommended starting at age 50.

- In 2010, 7.5% more Middlesex County adults over age 50 (70.5%) participated in colon-rectal screening than adults across the State (65.6%).
- In 2010, 46.9% more Middlesex County adults (70.5%) over age 50 had a colonoscopy / sigmoidoscopy than in 2006 (48%).
- Middlesex County reached the *Healthy People 2020* target of 70.5% of adults (50+) ever having colon-rectal screening in 2010.

Figure 4.92
Colonoscopy or Sigmoidoscopy
Percent of Adults Age 50+ Who Have Ever Had One

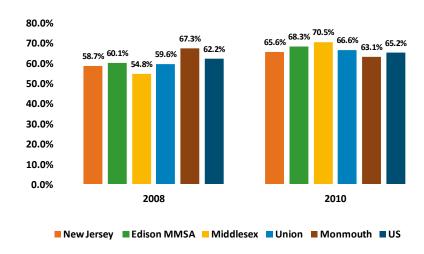
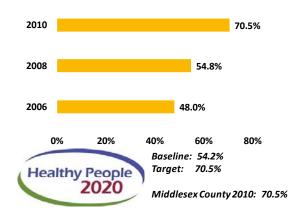


Figure 4.93
Colonoscopy or Sigmoidoscopy
Percent of Adults Age 50+ Who Have Ever Had One

#### **Middlesex County Trend**



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
SIGMOIDOSCOPY / COLONOSCOPY  Adults Age 50+ Who Have Ever Had a Sigmoidoscopy or Colonoscopy  % Yes		n/a	
RED: Poorest Performing Quartile			

Yellow: Middle Quartiles
Green: Best Performing Quartile

#### **Diabetes**

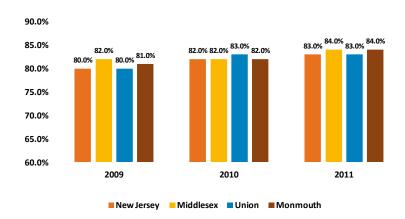
There are several ways to diagnose diabetes including A1C, Fasting Plasma Glucose (FPG), Oral Glucose Tolerance Test (OGTT) and Random (Casual) Plasma Glucose Test. Diabetes screenings are an effective means of managing illness.

- In 2011, 84% of Middlesex County diabetic Medicare enrollees received HbA1c screening, slightly more than statewide, 83%.
- The percent of Middlesex County diabetic Medicare enrollees receiving HbA1c screening has increased annually from 2003 (79%) to 2011 (84%).
- 6.7% Fewer Middlesex County diabetic Medicare enrollees (84%) were screened in 2011 than the CHR national benchmark (90%).

Figure 4.94

HbA1c Screening

Percent of Diabetic Medicare Enrollees That Receive Screening

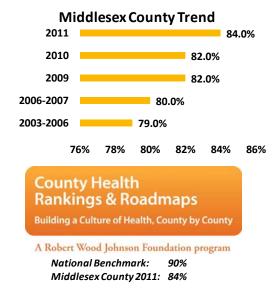


Source: County Health Rankings – Dartmouth Atlas of Health Care

Figure 4.95

HbA1c Screening

Percent of Diabetic Medicare Enrollees That Receive Screening



Source: County Health Rankings – Dartmouth Atlas of Health Care

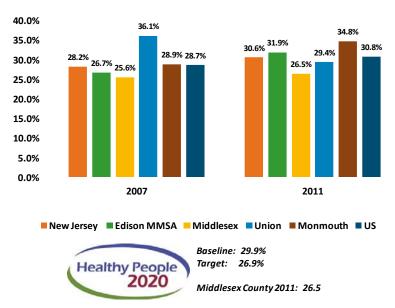
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
HbA1c SCREENING			
Diabetic Medicare Enrollees	n/a		
Percent Receiving Screening			
RED: Poorest Performing Quartile			
Yellow: Middle Quartiles			
Green: Best Performing Quartile			

# Cardiovascular Screening

## Hypertension

- In 2011, 26.5% of Middlesex County adults were aware that they suffered from hypertension, 13.4% fewer than New Jersey adults (30.6%).
- Between 2007 and 2011, there was a slight increase of 3.5% in Middlesex County adults who
  had been told they have high blood pressure.
- In 2011, Middlesex County (26.5%) met the *Healthy People 2020* target (26.9%) for adults with high blood pressure.

Figure 4.96
Hypertension Awareness
Adults Who Have Been Told They Have High Blood Pressure



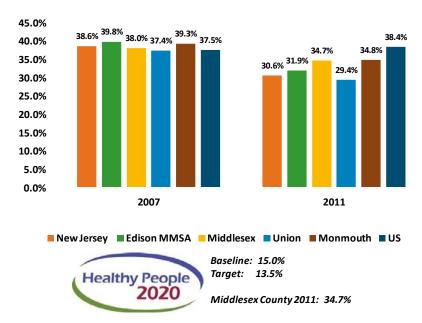
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
HYPERTENSION AWARENESS  Adults Who Have Been Told They Have High Blood Pressure  % Yes		n/a	

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

### Cholesterol

- In 2011, 34.7% of Middlesex County adults who had their cholesterol checked were made aware that the results were high, 13.4% more than New Jersey adults (30.6%).
- Between 2007 and 2011, there was an 8.6% decrease in Middlesex County adults with high cholesterol.
- In 2011, two and a half times more Middlesex County (34.7%) residents had high cholesterol than the *Healthy People 2020* target (13.5%).

Figure 4.97
Cholesterol Awareness
Adults Who Have Had Their Cholesterol Checked and Told It Was High



INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
CHOLESTEROL AWARENESS  Adults Who Have Had Their Cholesterol Checked and Told It Was High % Yes		n/a	
RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Rest Performing Quartile			

### *Immunizations*

It is always better to prevent disease than to treat it after it occurs; vaccines prevent disease and save millions of lives. Vaccines contain the same antigens that cause diseases. Immunity, the body's means to preventing disease, recognizes germs and produces antibodies to fight them. Even after many years, the immune system continues to produce antibodies to thwart disease from recurring. Through vaccination we can develop immunity without suffering from disease.

(http://www.cdc.gov/vaccines/vac-gen/howvpd.htm#why)

# Childhood Immunizations: DPT, polio, MMR & Hib (aged 19-35 months)

Young children are readily susceptible to disease and the consequences can be serious or even life-threatening. Childhood immunizations minimize the impact of vaccine preventable diseases. 4:3:1:3 refers to 4 or more doses of DTP/DT, 3 or more doses of poliovirus vaccine, 1 or more doses of MCV and 3 or more doses of Hib. (http://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/technotes.html)

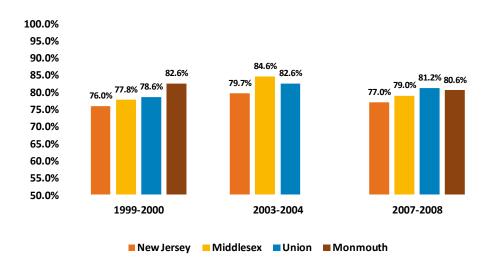
Conflicting information in the news and on the internet about children's immunizations has caused vaccine hesitancy among a small group of parents.

- Most recent data available, 2007-08, indicates 79% of Middlesex County children aged 19-35 months received the 4:3:1:3 vaccination series compared to 77% statewide.
- Middlesex County experienced a 6.6% decrease in childhood immunization rates from 84.6% in 2003-04 to 79% in 2007-08.

Figure 4.98

Biennial Childhood Immunization

Percent "Yes" for Ages 19-35 Months Received 4:3:1:3 Vaccination Series



Source: CDC – County Level Trends in Vaccination Coverage Among Children Aged 19-35 Months http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6004a1.htm Data are the most current County-Level figures available.

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
CHILDHOOD IMMUNIZATIONS  Biennial Childhood Immunizations for Ages 19-35 Months For 4:3:1:3 Series  %Yes	n/a	n/a	
RED: Poorest Performing Quartile			

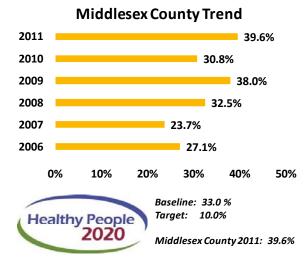
Yellow: Middle Quartiles Green: Best Performing Quartile

### Adult Flu

Immunizations are not just for children. As we get older, our immune system tends to weaken putting us at higher risk for certain diseases. Greater than 60 percent of seasonal flu-related hospitalizations occur in people 65 and older. The single best way to protect against the flu is annual vaccination. (http://www.cdc.gov/vaccines/adults/rec-vac/index.html)

- In 2011, 2.3% more Middlesex County adults over 65 (39.6%) did not have a seasonal flu shot than statewide (38.7%).
- Middlesex County adults over age 65 who did not have a seasonal flu shot increased 46.1% from 2006 (27.1%) to 2011 (39.6%).
- Middlesex County residents over age 65 who failed to receive a flu shot in the past year was four times greater than the Healthy People 2020 target 10%.

Figure 4.99
Flu Shot
Percent of Adults Age 65+ Who Have NOT Had A Flu Shot In the Past Year



Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS)

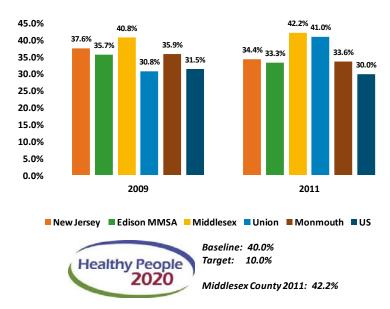
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
FLU SHOT Adults Age 65+ Who Have NOT Had a Flu Shot In The Past Year %No		n/a	

### Adult Pneumonia

The pneumococcal vaccine protects us against some of the 90 types of pneumococcal bacteria. Pneumococcal polysaccharide vaccine is recommended for all adults 65 years or older. (http://www.cdc.gov/pneumococcal/about/prevention.html)

- In 2011, 22.7% more Middlesex County residents over age 65 (42.2%) were never vaccinated for pneumonia than statewide (34.4%).
- Middlesex County adults over age 65 who never had a pneumonia shot increased 131% from 2006 (18.2%) to 2011 (42.2%).
- Middlesex County adults over age 65 were four times more likely to never have been vaccinated for pneumonia than the *Healthy People 2020* target of 10%.

Figure 4.100
Pneumonia Vaccination
Percent of Adults Age 65+ Who Have NEVER Had a Pneumonia Vaccination

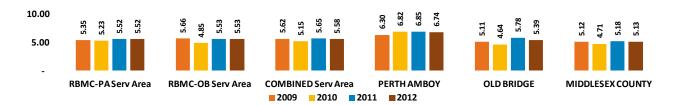


Source: CDC, Behavioral Health Risk Factor Surveillance System (BRFSS) Note: MMSA = Metropolitan and Micropolitan Statistical Area

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PNEUMONIA VACCINATION  Adults Age 65+ Who Have NOT Ever Had a Pneumonia Vaccination  % Never		n/a	
	-		

• 2012 Hospital utilization rates for pneumonia were highest in the City of Perth Amboy at 6.7/1,000 compared to 5.1 in Middlesex County.

Table 4.101
Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population
Pneumonia



Source: UB-04 Acute Care Discharges (2009 – 2012), Population: 2000, 2010 Census, 2011 & 2012 Census ACS Estimates, 2009 Straight Line Value Based on 2000 and 2010 Census

Definition: Inpatient, Same Day Stay and ED Discharges - For MS-DRGs 177, 178, 179, 193, 194, 195

## 5. Physical Environment

According to the World Health Organization (WHO), environmental health addresses all the physical, chemical and biological factors external to a person, and all the related factors impacting behaviors. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments. (http://www.who.int/topics/environmental\_health/en/)

## **Air Quality**

Outdoor air quality has improved since the 1990s, but many challenges remain in protecting Americans from air quality problems. Air pollution can make it harder for people with asthma and other respiratory diseases to breathe. (http://www.cdc.gov/air/default.htm)

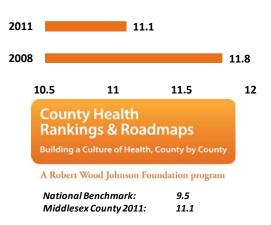
- In 2011, the daily measure of fine particle matter in Middlesex County (11.1 PM2.5) was slightly lower than the State (11.3 PM2.5).
- Middlesex County experienced a 5.9% reduction in fine particulate matter in between 2008 (11.8 per cubic meter) and 2011 (11.1 per cubic meter).
- In 2011, Middlesex County (11.1 PM2.5) average daily measure of fine particles was 16.8% greater than the CHR national benchmark (9.5 PM2.5) by 16.8%.

Figure 4.102

Average Daily Measure of the Fine Particulate Matter in Micrograms per Cubic Meter (PM2.5)

In A County

# **Middlesex County Trend**



Source: County Health Rankings, CDC Wonder Environmental Data

INDICA	TOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
ANNUAL NUMBER OF UNHEALTHY A	IR QUALITY DAYS	n/a		
RED: Poorest Performing Quartile Yellow: Middle Quartiles Green: Best Performing Quartile				

### **Lead Hazards**

Lead is a naturally occurring metal in the environment. Used for centuries in many industries, the most common source of lead in New Jersey is found in paint used in homes built prior to 1978.

The Centers for Disease Control and Prevention (CDC) defines lead poisoning in children as a blood lead level of 10 micrograms per deciliter ( $\mu g/dL$ ) or above. Young children can be exposed by swallowing lead dust or soil that gets on their hands or objects they put into their mouths such as toys; swallowing leaded paint chips; breathing leaded dust or lead contaminated air and eating food or drinking water that is contaminated with lead.

Very high levels of lead can cause seizures, brain damage, developmental or intellectual disabilities, coma and even death. Exposure to lead, even at low levels, has been associated with decreased hearing, lower intelligence, hyperactivity, attention deficit, and developmental problems. (<a href="http://www.nj.gov/health/fhs/newborn/lead.shtml">http://www.nj.gov/health/fhs/newborn/lead.shtml</a>)

- Twenty-seven percent of New Jersey homes and 18% of Middlesex County homes were built prior to 1950 therefore posing possible lead hazards to their residents.
- In 2009, .4% of Middlesex County children had elevated blood lead levels compared to .5% statewide.

• Middlesex County reported a 42.9% decrease in children with elevated blood lead levels from 2007 (0.7%) to 2009 (0.4%).

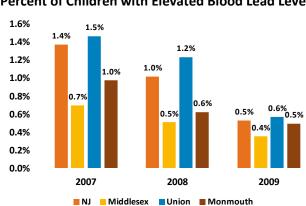


Figure 4.103
Percent of Children with Elevated Blood Lead Levels

Source: CDC http://www.cdc.gov/nceh/lead/data/state/njdata.htm

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
HOUSING BUILT BEFORE 1950 WITH POSSIBLE LEAD-BASED PAINT HAZARD	n/a	n/a	
RED: Poorest Performing Quartile			

Yellow: Middle Quartiles
Green: Best Performing Quartile

## Access to Healthy Foods

Choices about food and diet are influenced by accessibility and affordability of retailers. Specifically, travel time to shopping, availability of healthy foods and food prices are key to decision making. Low-income families face greater barriers in accessing healthy and affordable food retailers, which in turn negatively affect diet and food security.

(http://www.ers.usda.gov/topics/food-choices-health/food-access.aspx)

- Four percent of New Jersey and Middlesex County low income residents did not live close to a grocery store in 2010.
- In 2010, Middlesex County (4%) had four times the CHR national benchmark (1%) of low income residents that did not live near a grocery store.
- In 2010, 55% of Middlesex County restaurants are fast food compared to 50% of restaurants in New Jersey.
- In 2010, Middlesex County (55%) had 50.9% more fast food establishments than the CHR national benchmark (27%).
- In 2011, Middlesex County (16/100,000) had 20% fewer liquor stores than New Jersey (20/100,000).

Figure 4.104
Limited Access to Healthy Foods

	NJ	Middlesex	Union	Monmouth
Percent of Population Who Are Low Income And Do Not Live Close to A Grocery Store (2010)	4.0%	4.0%	1.0%	4.0%
Percent of All Restaurants That Are Fast Food Establishments (2010)	50.0%	55.0%	43.0%	44.0%
Number of Liquor Stores (2011) (Rate / 100,000 Population)	20.0	16.0	23.0	21.0

County Health
Rankings & Roadmaps
Building a Culture of Health, County by Coun

A Robert Wood Johnson Foundation program

National Benchmark: 1.0% Middlesex County: 4.0%

National Benchmark: 27.0% Middlesex County: 55.0%

Source: County Health Rankings, US Census Bureau's County Business Patterns – United States Department of Agriculture Food Environment Atlas

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
PEOPLE WHO ARE LOW INCOME & DO NOT LIVE CLOSE TO A GROCERY STORE Percent of Total Population	n/a		
FAST FOOD ESTABLISHMENTS Percent of All Restaurants	n/a		
LIQUOR STORES Rate/100,000 Population	n/a	n/a	

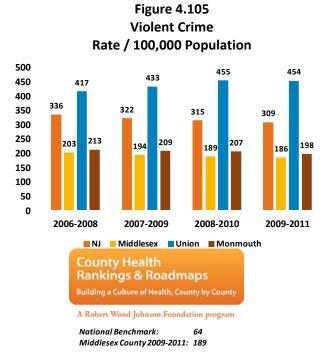
RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

### **Injury and Crime Prevention**

Injuries and violence are widespread. Most events resulting in injury, disability or death are predictable and preventable. Individual behaviors, physical environment, access to health services and the social environment affect the risk of unintentional injury and violence.

• The 2009-2011 violent crime rate in Middlesex County (186/100,000) was 39.8% lower than the State crime rate (309/100,000).

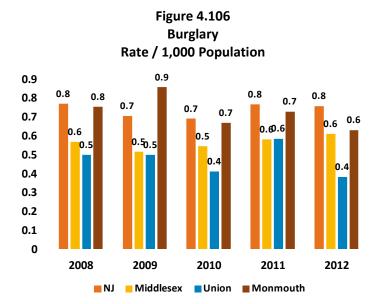
- The violent crime rate in Middlesex County decreased 8.4% from 2006-2008 (203/100,000) to 2009-2011 (186/100,000).
- From 2009-2011, the Middlesex County (186/100,000) violent crime rate was three times greater than the CHR national benchmark (64/100,000).



Source: County Health Rankings - The Uniform Crime Reporting (UCR) Program

INDICAT	ALTHY PEOPLE 020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
VIOLENT CRIME Rate / 100,000 Population	n/a		
RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Best Performing Quartile			

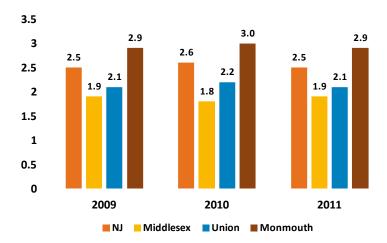
- Middlesex County (.6/1,000) had 25% fewer burglaries than New Jersey (.8/1,000) in 2012.
- The Middlesex County burglary rate remained relatively constant at .6/1,000 from 2008 through 2012.



Source: NJ Department Of Law And Public Safety, Division Of State Police – Uniform Crime Reporting Unit http://www.njsp.org/info/stats.html

- Compared to New Jersey (2.5/1,000), Union (2.1/1,000) and Monmouth (2.9/1,000) counties, Middlesex County (1.9/1,000) had the lowest rate of domestic violence arrests in 2011.
- Between 2008 and 2011, the rate of domestic violence arrests in Middlesex County remained fairly consistent at 1.9/1,000.

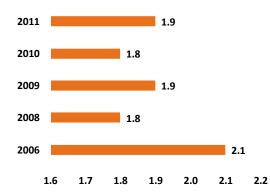
Figure 4.107
Total Domestic Violence Arrests
Rate / 1,000 Population



Source: NJ Department Of Law And Public Safety, Division Of State Police – Uniform Crime Reporting Unit http://www.njsp.org/info/stats.html

Figure 4.108
Total Domestic Violence Arrests
Rate / 1,000 Population

# **Middlesex County Trend**

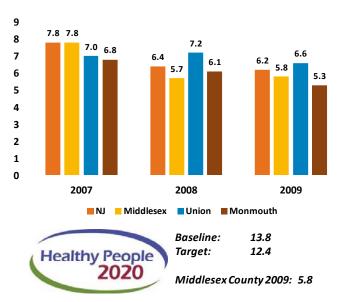


Source: NJ Department Of Law And Public Safety, Division Of State Police – Uniform Crime Reporting Unit http://www.njsp.org/info/stats.html

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DOMESTIC VIOLENCE ARRESTS Rate / 1,000 Population	n/a	n/a	

- In 2009, Middlesex County (5.8/100,000) had 6.5% fewer motor vehicle crash deaths than New Jersey (6.2/100,000).
- Deaths due to motor vehicle accidents decreased 20.5% in Middlesex County between 2007 (7.8/1,000) and 2009 (5.8/1,000).
- 2009 Middlesex County (5.8/1,000) car accident related deaths occurred 53.2% less often than the *Healthy People 2020* target (12.4/1,000).

Figure 4.109
Motor Vehicle Crash Deaths
Age-Adjusted Rate / 100,000 Population



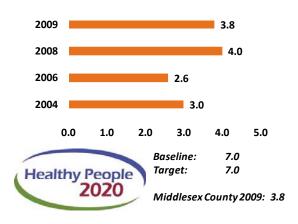
Source: NJDOH Center For Health Statistics, State Health Assessment Data

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO MOTOR VEHICLE CRASHES Rate / 1,000 Population		n/a	

- The 2009 Middlesex County death rate due to falls (3.8/100,000) was the same as the New Jersey rate (3.8/100,000).
- Middlesex County experienced a 26.7% decline in deaths due to falls between 2004 (3/100,000) and 2009 (3.8/100/000).
- In 2009, Middlesex County (3.8/100,000) had 45.7% fewer deaths due to falls than the *Healthy People 2020* target (7/100,000).

Figure 4.110
Deaths Due To Falls

# **Middlesex County Trend**



Source: NJDOH Center For Health Statistics, State Health Assessment Data

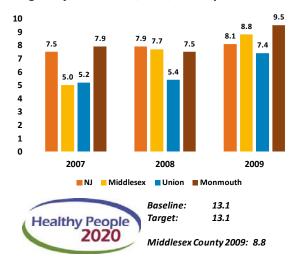
INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO FALLS Rate / 1,000 Population		n/a	

- In 2009, Middlesex County (8.8/100,000) had 8.6% more deaths due to accidental poisoning and exposure to noxious substances than statewide (8.1/100,000).
- Accidental deaths as a result of poison and exposure to noxious fumes increased 43.2% from 2007 (5/100,000) to 2009 (8.8/100,000).
- Middlesex County had 32.8% fewer deaths due to accidental poisoning and exposure to noxious substances in 2009 than the *Healthy People 2020* target (13.1/100,000).

Figure 4.111

Deaths Due To Accidental Poisoning And Exposure To Noxious Substances

Age-Adjusted Rate / 100,000 Population



Source: NJDOH Center For Health Statistics, State Health Assessment Data

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
DEATHS DUE TO POISONING Rate / 1,000 Population		n/a	
RED: Poorest Performing Quartile			

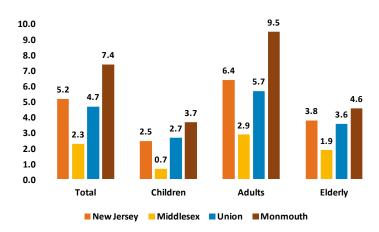
6. Behavioral Health Utilization

Yellow: Middle Quartiles Green: Best Performing Quartile

## **Mental Health**

- In 2012, Middlesex County (2.3/1,000) had 55.8% fewer hospital admissions for mental health conditions than the State (5.2/1,000).
- In 2012, Middlesex County adults (2.9/1,000) had the highest rate of inpatient hospital admissions compared to the elderly (1.9/1,000) and children (.7/1,000).
- Middlesex County had 20.7% fewer hospital admissions for mental/behavioral health conditions in 2012 (2.3/1,000) than in 2010 (2.9/1,000).

Figure 4.112
Hospital Admissions for Mental/Behavioral Health Conditions (2012)
By Age; Rate / 1,000 Population

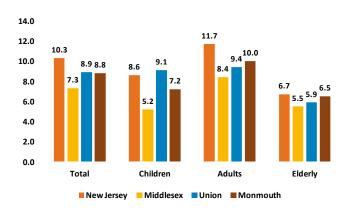


Source: NJDOH - UB-04 Data 2010-2012; United States Census

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
HOSPITAL ADMISSIONS FOR MENTAL / BEHAVIORAL HEALTH CONDITIONS Rate/1,000 Population	n/a	n/a	

- In 2012, Middlesex County (7.3/1,000) had 29.1% fewer ED visits for mental health conditions than the State (10.3/1,000).
- In 2012, Middlesex County adults (8.4/1,000) had the highest rate of ED visits compared to the elderly (5.5/1,000) and children (5.2/1,000).

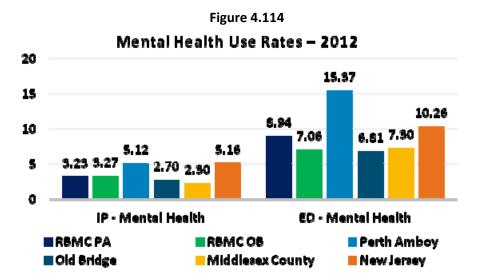
Figure 4.113
ED Visits for Mental/Behavioral Health Conditions (2012)
By Age; Rate / 1,000 Population



Source: NJDOH – UB-04 Data 2010-2012; United States Census

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
ED VISITS FOR MENTAL / BEHAVIORAL HEALTH CONDITIONS BY AGE (All Ages) Rate/1,000 Population	n/a	n/a	
ED VISITS FOR MENTAL / BEHAVIORAL HEALTH CONDITIONS BY AGE (0-17) Rate/1,000 Population	n/a	n/a	
ED VISITS FOR MENTAL / BEHAVIORAL HEALTH CONDITIONS BY AGE (18-64)  Rate/1,000 Population	n/a	n/a	
ED VISITS FOR MENTAL / BEHAVIORAL HEALTH CONDITIONS BY AGE (65+) Rate/1,000 Population	n/a	n/a	

- In 2012, inpatient mental health use rates in Perth Amboy (5.1/1,000) were similar to New Jersey rates (5.2/1,000) but exceeded Middlesex County rates (2.3/1,000) by 126%.
- In 2012, emergency department utilization rates for mental health in Perth Amboy (15.4/1,000) were 110.5% greater than the Middlesex County rate (7.3/1,000) and 49.8% greater than the New Jersey rate (10.3/1,000).
- In 2012, emergency department utilization rates for mental health in Old Bridge (6.8/1,000) were 33.6% less than the New Jersey rate (10.3/1,000) and 6.8% less than Middlesex County rates (10.3/1,000).



\*Source: UB-04 2012 Discharges; US Census ACS 2012 5yr Estimate

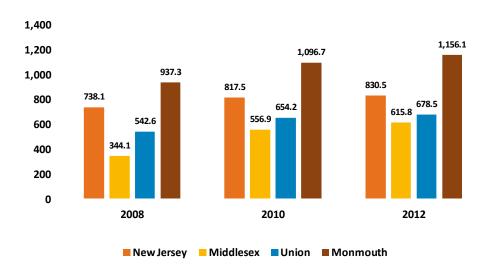
#### Substance Abuse

Substance abuse has a major impact on individuals, families and communities. In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95 percent of people with substance use problems are considered unaware of their problem. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders. (http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse)

- In 2012, Middlesex County (615.8/1,000) had 25.9% fewer residents admitted for substance abuse treatment than the State (830.5/1,000).
- Between 2008 (344.1/100,000) and 2012 (615.8/1,000), Middlesex County experienced a 79% increase in the rate of substance abuse treatment admissions to any facility.

<sup>\*\*</sup> Mental Health Defined As MDC 19

Figure 4.115
Total Substance Abuse Treatment Admissions
Rate / 100,000 Population

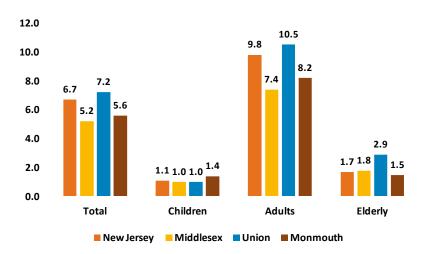


Source: NJDOH, Division of Addiction Services, NJ Drug and Alcohol Abuse Treatment; United States Census & American Community Survey

INDICATOR	HEALTHY PEOPLE 2020 TARGET	COUNTY HEALTH RANKINGS BENCHMARK	NEW JERSEY
TOTAL SUBSTANCE ABUSE TREATMENT ADMISSIONS Rate/100,000 Population	n/a	n/a	

• In 2012, Middlesex County (5.2/1,000) had 22.3% fewer residents ED visits for substance abuse than the State (6.7/1,000).

Figure 4.116
ED Visits for Substance Abuse (2012)
By Age; Rate / 1,000 Population



Source: NJDOH – UB-04 Data 2010-2012; United States Census

Heroin and other opioids were the leading reason for admission to a drug treatment center.
 Similar to New Jersey (44%) in 2012, 43.5% of Middlesex County drug treatment admissions were due to heroin or other opioids.

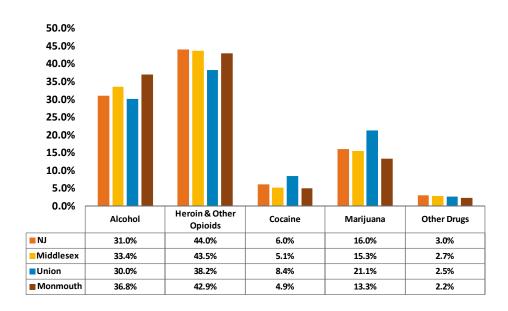


Figure 4.117
Primary Drug Treatment Admissions (2012)

Source: NJDOH, Division of Addiction Services, NJ Drug and Alcohol Abuse Treatment; http://www.state.nj.us/humanservices/das/news/reports/statistical/

Note: Percentages Are Based On The Total Number of Treatment Admissions For All Primary Drugs.

- In 2012, acute care hospital use rates for substance abuse in Perth Amboy (1.24/1,000) and Old Bridge (1.25/1000) were approximately 36% better than New Jersey rates (1.97/1,000).
- In 2012, emergency department utilization rates for substance abuse in Perth Amboy (12.53/1,000) were 141% greater than the Middlesex County rate (5.2/1,000) and 86.7% greater than the New Jersey rate (6.71/1,000).
- In 2012, emergency department utilization rates for substance abuse in Old Bridge (5.18/1,000) were 22.8% less than the New Jersey rate (6.71/1,000) and similar to Middlesex County rates (5.2/1,000).

**Figure 4.118** Substance Abuse Use Rates - 2012 15 12.53 10 6.9 6.71 5.16 5.20 4.56 1.33 1.29 1.24 1.25 1.19 1.97 IP - SA ED - SA RBMC PA RBMC OB Perth Amboy ■ Old Bridge Middlesex County New Jersey

\*Source: UB-04 2012 Discharges; US Census ACS 2012 5yr Estimate

<sup>\*\*</sup>Substance Abuse Defined As MDC 20

## 5. CONSUMER SURVEY

In order to better understand the health needs within the Raritan Bay Medical Center Service Area, NSI, Inc., engaged residents in a Community Health Assessment survey. The survey asked about perceived health status, health care coverage, morbidity, services utilized, barriers and the overall health of the community. In conjunction with the Health Profile and assets/gaps analysis, the phone survey provided consumer input for priority setting.

### A. SURVEY SAMPLE DEMOGRAPHICS

## Age

The age distribution of the survey samples (RBMC-PA, RBMC-OB, Combined RBMC PSAs) was older than the total service area population.

- Approximately 25% of Combined PA/OB Service Area survey respondents were age 18-44 compared to 46% of the total population, suggesting an under sampling of this age cohort.
- About 47% of Combined PA/OB Service Area survey respondents were 45-64 years old compared to 36% of the total population, indicating a small oversampling of this age group.
- 27.5% of Combined PA/OB Service Area survey respondents were age 65 and older compared to 18% of the total population.

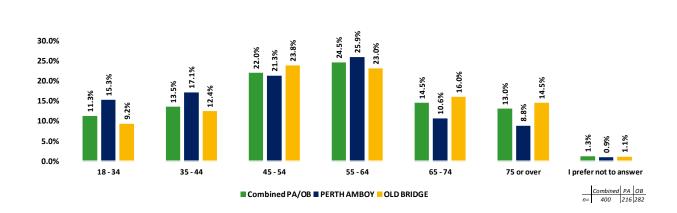


Figure 5.1 What is Your Age?

### <u>Gender</u>

 Approximately 60% of survey respondents were female, compared to the general population distribution 52% females, 48% males. This may be reflective of the fact that women tend to make most health care decisions for their families.

# Race

• Less than half (48.7%) of Combined PA/OB survey respondents indicated they were White, 34.3 Hispanic, 6.6% Asian and 3.9% Black/African American.

70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
African American/Black
Asian
Hispanic/Latino
Native American
White/Caucasian
Other

| Combined PA/OB | PERTHAMBOY | OLD BRIDGE

Figure 5.2
What Group Do You Most Identify With?

#### Income

- Slightly more than one-third of Combined PA/OB Service Area (34%) respondents reported an income between \$50,000 and \$100,000.
- 18.1% of PA Service Area participants reported a household income less than \$25,000.
- RBMC Perth Amboy Service Area had a median income of \$73,409 and the Old Bridge Service Area had a median income of \$76,080.

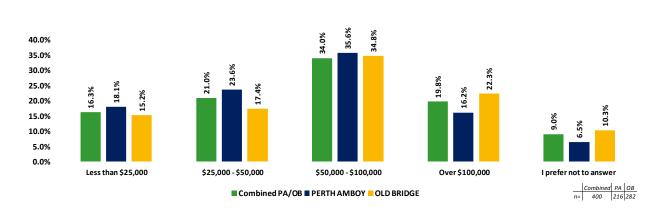


Figure 5.3
What Is Your Total Household Income?

## **Employment**

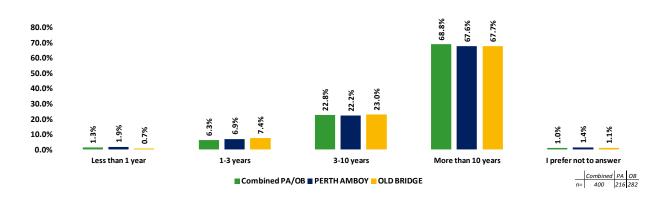
- 64.2% of non-working survey participants in the RBMC-OB Service Area were retired compared to 49.4% in the RBMC-PA Service Area.
- 31.6% of Perth Amboy Service Area residents surveyed were not working because they were sick or disabled compared to 21.1% from the Old Bridge Service Area.
- The unemployment status of survey respondents (6%) was similar to 2014 Middlesex County (6.6%) figures.

Figure 5.4

## Length of Residence

- Approximately 69% of Combined Service Area participants have lived in their communities for 10 or more years.
- An additional 22% of Combined Service Area respondents have lived in the area between three and ten years.

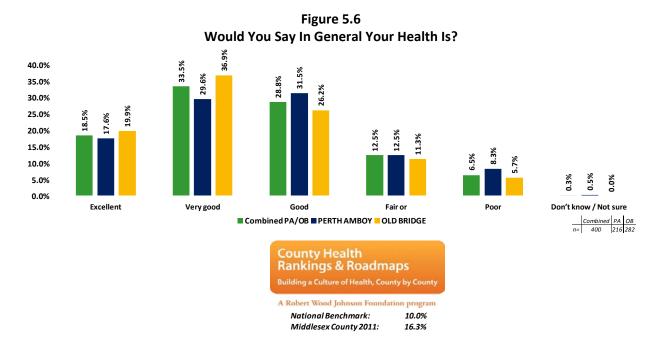
Figure 5.5 How Long Have You Live In the Local Area Of  $\dots$  ?



## B. HEALTH STATUS & HEALTH COVERAGE

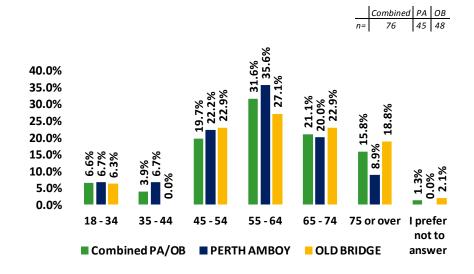
## **General Health**

- Slightly more survey respondents indicated their general health status is fair or poor (RBMC-PA 20.8%, Combined 19%, RBMC-OB 17%) than Middlesex County (16.3%) 2011 BRFSS data.
- RBMC-PA Service Area survey respondents who indicated fair or poor health status (20.8%) was double the CHR national benchmark (10%).



- 68.5% of respondents age 55+ from the Combined RBMC Service Areas self-identified fair or poor health.
- 35.6% of PA Service Area respondents aged 55-64 indicated fair or poor general health.
- 18.8% of respondents aged 75+ from the RBMC-OB Service Area identified themselves in fair or poor health.

Figure 5.7
Respondents Answering "Fair or Poor" by Age Cohort

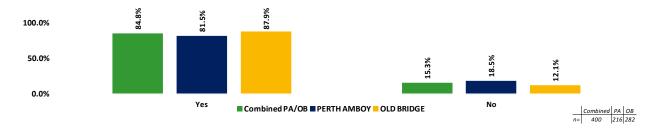


## **Providers**

• 84.8% of Combined Service Area survey respondents have one individual as their personal doctor or health care provider.

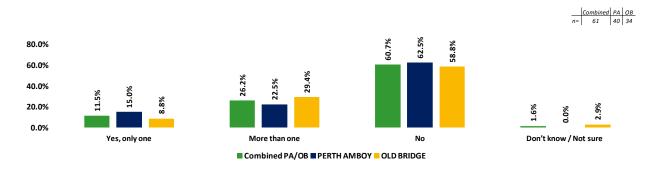
Figure 5.8

Do You Have One Person You Think Of As Your Personal Doctor Or Health Care Provider?



• Of the 15% who did not identify one individual as their health care provider in the Combined Service Area, 60.7% responded they did not have a personal doctor or health care provider.

Figure 5.9
Is There More Than One, or Is There No Person Who You Think Of as Your Personal Doctor or Health Care Provider?



- Five percent more RBMC-OB Service Area respondents (83%) indicated seeing a physician within the past year for a routine checkup than PA Service Area participants (78.7%).
- Four percent of Combined Service Area residents surveyed did not visit a doctor for routine services in greater than five years.

Figure 5.10

About How Long Has It Been Since You Last Visited A Doctor For A Routine Checkup?

A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.



# **Morbidity**

Survey participants were asked if a health care professional advised them that they suffered from diabetes, high blood pressure, high cholesterol, heart attack, heart disease or asthma.

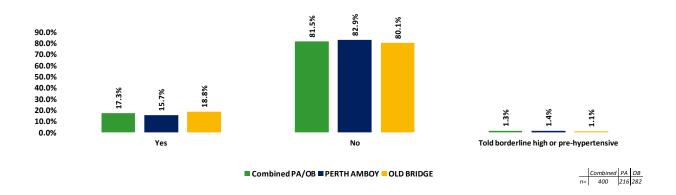
### **Diabetes**

• Diabetes diagnosis reported by survey participants (Combined PSA 17.3%, RBMC-PA 15.7%, RBMC-OB 18.8%) far exceeded Middlesex County (9.7%) 2010 BRFSS data.

Figure 5.11

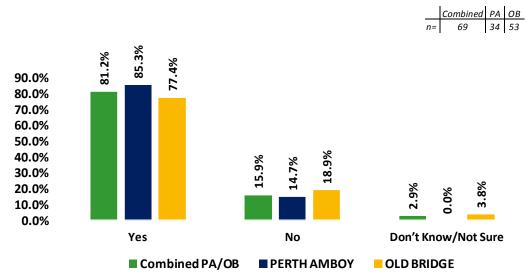
Have You Ever Been Told By A Doctor, Nurse Other Health Care Professional That You Have Any Of
The Following Conditions: Diabetes?

If respondent says pre-diabetes or borderline diabetes, use response code "Don't know / Not sure".



- 15.9% of Combined Service Area survey respondents with diabetes are not receiving treatment.
- 18.9% of RBMC-OB Service Area respondents diagnosed with diabetes are not getting the care they need.

Figure 5.12
Are You Getting Treatment For Diabetes Now?

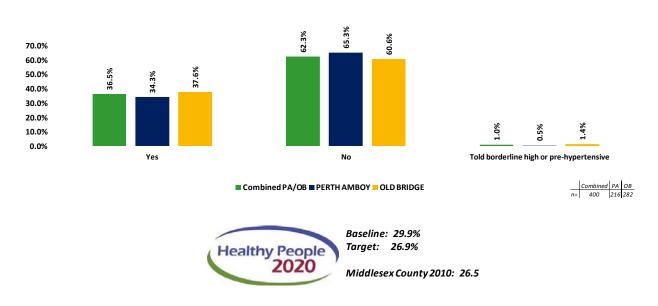


## High Blood Pressure

- Survey participants with high blood pressure diagnosis (Combined PSA 36.5%, RBMC-PA 34.3%, RBMC-OB 37.6%) exceeded Middlesex County (26.5%) and New Jersey (30.6%) 2011 BRFSS data.
- Survey respondents in all service areas (Combined PSA 36.5%, RBMC-PA 34.3%, RBMC-OB 37.6%) exceeded the *Healthy People 2020* target (26.9%) for hypertension.

Figure 5.13

Have You Ever Been Told By A Doctor, Nurse Other Health Care Professional
That You Have: High Blood Pressure?



- 7.5% of Combined Service Area and RBMC-OB Service Area survey hypertensive respondents are not receiving treatment.
- 9.5% of RBMC-PA Service Area respondents diagnosed with high blood pressure are not getting the care they need.

Figure 5.14
Are you getting treatment for high blood pressure now?

## Cholesterol

- Survey participants diagnosed with high blood cholesterol (Combined PSA 33.5%, RBMC-PA 31%, RBMC-OB 36.2%) were similar to Middlesex County (34.7%) 2011 BRFSS data.
- Survey respondents in all service areas (Combined PSA 33.5%, RBMC-PA 31%, RBMC-OB 36.2%)
   exceeded the Healthy People 2020 target (13.5%) for high blood cholesterol.

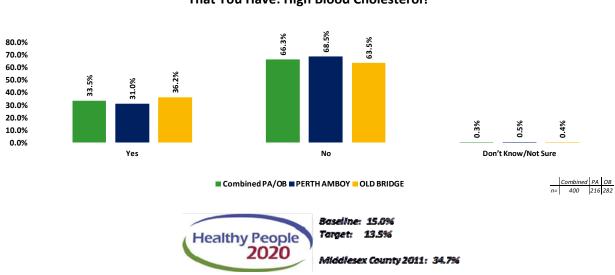
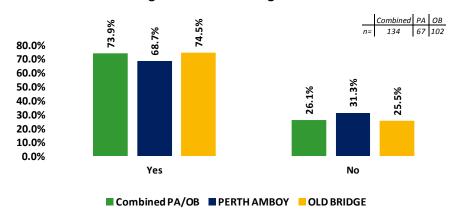


Figure 5.15
Have You Ever Been Told By A Doctor, Nurse Other Healthcare Professional
That You Have: High Blood Cholesterol?

- 26.1% of Combined Service Area respondents diagnosed with high blood cholesterol are not taking medication to control it.
- 31.3% of RBMC-PA Service Area respondents with high blood cholesterol are not getting the medication they need.

Figure 5.16
Are You Taking Medication For High Cholesterol Now?



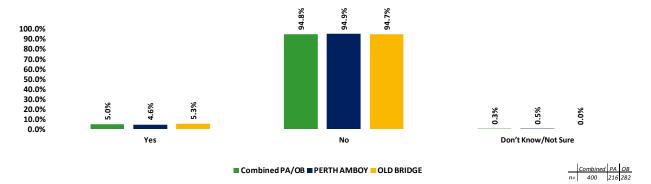
## Cardiovascular Disease

Myocardial Infarction (Heart Attack)

Survey participants who have suffered a Myocardial Infarction (Combined PSA 5%, RBMC-PA 4.6%, RBMC-OB 5.3%) far exceeded Middlesex County (2.6%) 2010 BRFSS data.

Figure 5.17

Have You Ever Been Told By A Doctor, Nurse Other Health Care Professional
That You Have: Had A Heart Attack, Also Called A Myocardial Infarction?

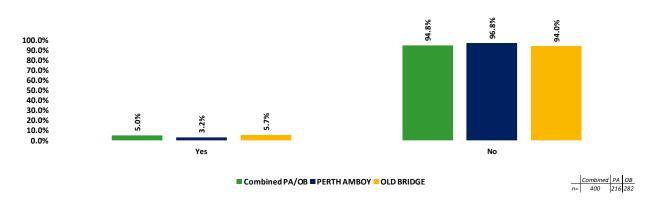


## Angina or Coronary Heart Disease

• A diagnosis of coronary heart disease in the Combined Service Area (5%) was 13.6% more frequent than Middlesex County (4.4%) 2010 BRFSS data.

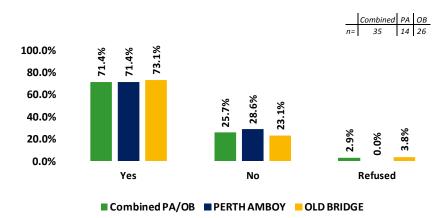
Figure 5.18

Have You Ever Been Told By A Doctor, Nurse Other Health Care Professional
That You Have: Angina Or Coronary Heart Disease?



- Of those survey respondents diagnosed with angina in the RBMC-PA Service Area, 28.6% are not receiving treatment.
- 23.1% RBMC-OB Service Area respondents were without care for heart disease compared to 25.7% in the RBMC-PA Service Area..

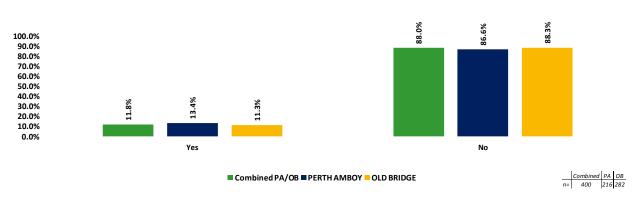
Figure 5.19
Are You Getting Treatment For Heart Disease Now?



### **Asthma**

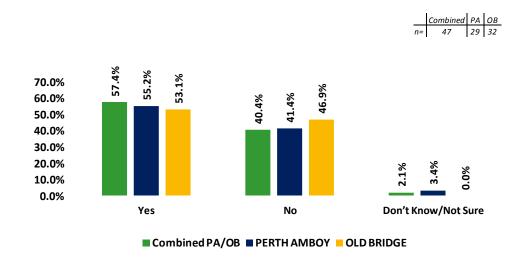
• Survey participants diagnosed with asthma in the Combined Service Area (11.8%), RBMC-PA Service Area (13.4%) and RBMC-OB Service Area (11.3%) exceeded Middlesex County (7.5%) 2010 BRFSS data.

Figure 5.20
Have You Ever Been Told By A Doctor, Nurse Other Health Care Professional
That You Have: Asthma?



- 40.4% of Combined Service Area asthmatics are not receiving treatment.
- 46.9% of RBMC-OB Service Area respondents with asthma are not getting treatment.

Figure 5.21
Are You Getting Treatment For Asthma Now?



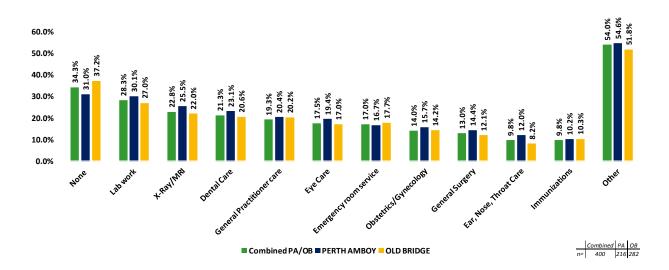
#### Services

Services Received Outside the Community

- Within the past year, approximately two-thirds of survey participants received health services outside their local communities.
- Lab work, x-ray/MRI and dental care were the Top 3 services sought outside the area.

Figure 5.22
Within The Past Year, What Type Of Health Services Did You Or Anyone Living In Your Home Receive Outside Your Community?

Showing Top 10 mentioned responses.



- Practitioner location was cited as the primary reason for seeking care outside the community.
- Other reasons individuals retained care outside the community was "lack of availability of physicians for the required service" and "inability to find a good provider."

50.0%
45.0%
40.0%
35.0%
35.0%
35.0%
25.0%
20.0%
10.0%
5.0%
0.0%

Why decorate the form the standard of the st

Figure 5.23
If You Got Health Care Outside Your Community, Why?

### **Mental Health Services**

• 16% of Combined Service Area respondents indicated they or someone in their family utilized mental health services within the past year.

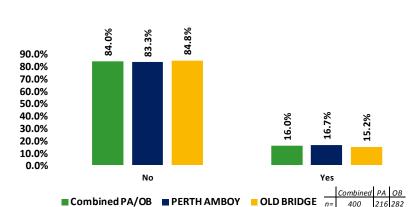


Figure 5.24
Within The Past Year, Did You Or Anyone In Your Family
Require Any Type Of Mental Health Services?

- Counseling and/or therapy was most utilized by those requiring mental health services, 71.9% of Combined Service Area and 80.6% of RBMC-PA Service Area respondents.
- 11.6% of RBMC-OB Service Area respondents who required mental health services were hospitalized.
- 11.1% of Perth Amboy Service Area respondents who received services due to drugs and/or alcohol compared to 4.7% in the Old Bridge Service Area.

90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
Erisis Care

Hospitalization

Counseling/Therapy

Drug & Alcohol

Other

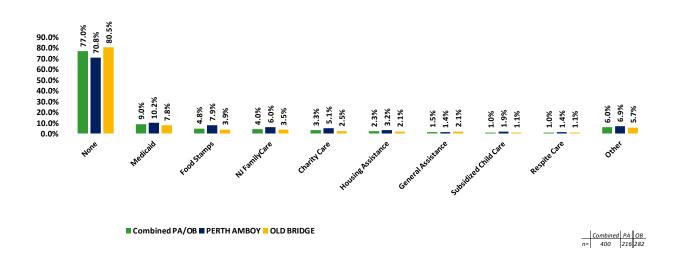
Combined PA/OB PERTH AMBOY OLD BRIDGE

Figure 5.25 What Type Of Service Was Utilized?

### **Social Services**

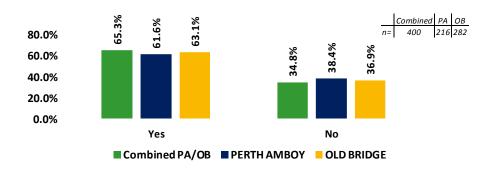
- Within the past year, 29.2% of RBMC-PA Service Area residents and 19.5% of RBMC-OB Service Area residents surveyed utilized social services for themselves or their families.
- Medicaid, NJ Family Care and food stamps were the most utilized social services in all service areas.
- Greater percentages of respondents in the RBMC-PA Service Area used each of the Top 3 services as compared to RBMC-OB. (Medicaid: RBMC-PA 10.2%, RBMC-OB 7.8%; Food Stamps: RBMC-PA 7.9%, RBMC-OB 3.9%; Family Care: RBMC-PA 6.0%, RBMC-OB 3.5%)

Figure 5.26
Within The Past Year, What Type Of Social Service Benefits
Did You Or Anyone In Your Family Need?



- Of those in need of social service benefits, 38.4% of RBMC-PA Service Area residents surveyed were unable to obtain them within their local community.
- 10% more RBMC-PA Service Area (38.4%) respondents were unable to receive needed social services than Combined Service Area (34.8%) respondents.

Figure 5.27
If You Needed Social Benefits, Were You Able To Get Them In Your Community?

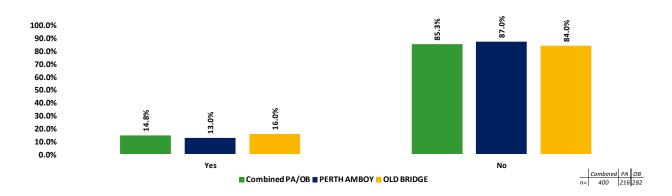


## Long-term Care

• Within the past year, approximately 15% of Combined Service Area survey participants required long-term care placement.

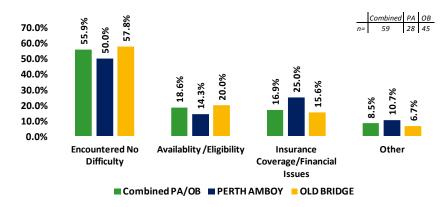
Figure 5.28
Within The Past Year, Have Any Of Your Family/Friends Needed Long-Term Care Placement?

(If needed: nursing home, rehab, etc.)



 Of those that needed long-term care placement, 25% of RBMC-PA Service Area survey participants encountered difficulty as a result of financial or insurance issues compared to 15.6 of RBMC-OB Service Area respondents.  20% of RBMC-OB Service Area survey respondents dealt with availability or eligibility constraints in receiving long-term care placement compared to 14.3% of RBMC-PA Service Area respondents.

Figure 5.29
If Yes, What Difficulty (If Any) Was Encountered In Obtaining A Placement?



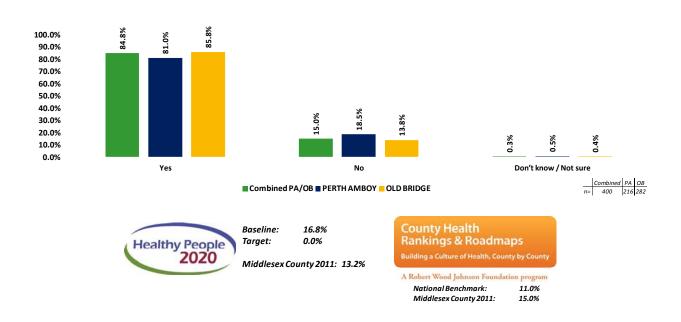
## Insurance

- Middlesex County (13.2%), New Jersey (15%) and all survey service areas (Combined 15%, RBMC-OB 13.8%) had similar percentages of people lacking health care coverage.
- Forty percent more RBMC-PA (18.5%) Service Areas respondents were without health care coverage than Middlesex County (13.2%) residents.
- All service areas far exceed the *Healthy People 2020* target (0%) for not having health insurance and CHR national benchmark (11%).

Figure 5.30

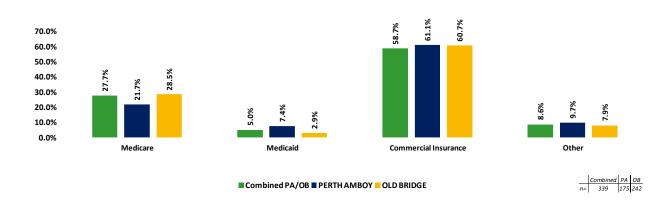
Do You Have Any Kind Of Health Care Coverage, Including Health Insurance, Prepaid Plans

Such As HMOs, Or Government Plans Such As Medicare Or Medicaid?



- Approximately 59% of Combined Service Area respondents had commercial insurance, followed by Medicare (28%) and Medicaid (5%).
- RBMC-OB Service Area survey respondents reported 28.5% Medicare coverage compared to 21.7% in the RBMC-PA Service Area.
- RBMC-PA Service Area survey respondents reported 7.4% Medicaid coverage as compared to 2.9% in the RBMC-OB Service Area.

Figure 5.31
What Type Health Care Coverage Of Do You Have?
(Based on respondents with coverage)

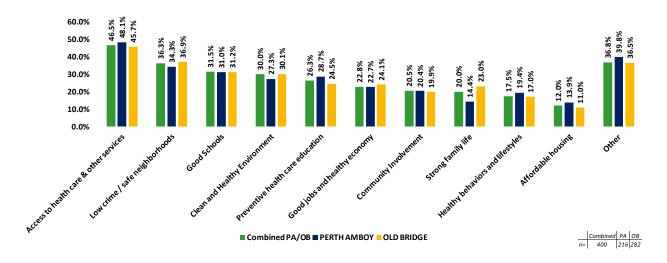


#### C. HEALTHY COMMUNITY

Survey respondents were asked to prioritize issues which affect quality of life within their community and define a healthy community.

- Across all service areas (Combined 46.5%, RBMC-PA 48.1%, RBMC-OB 45.7%), access to health care and other services was the predominant factor for defining a healthy community.
- Low crime and safe neighborhoods was ranked second in importance for a healthy community by all service areas (Combined 36.3%, RBMC-PA 34.3%, RBMC-OB 36.9%).
- Good quality schools were the third most important factor to define a healthy community (Combined 31.5%, RBMC-PA 31%, RBMC-OB 31.2%).

Figure 5.32
In The Following List, What Do You Think Are The Three Most Important
Factors That Define A "Healthy Community"
(If needed: Those factors that most affect the quality of life in a community). Showing Top 10 mentioned responses.

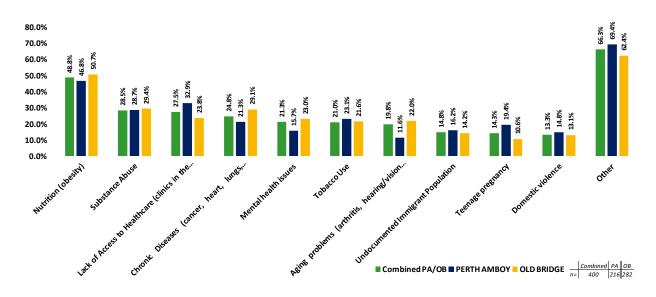


#### **Health Problems in the Community**

Identification of health problems in the community varied across the Perth Amboy and Old Bridge Service Area respondents.

- Nutrition (obesity) was identified by 48.8% of the Combined Service Area sample as the most important health problem in their community.
- Within the Combined Service Area, substance abuse (28.5%) and lack of access to health care (27.5%) were also identified as priorities.
- Among RBMC-OB Service Area residents, obesity (50.7%), substance abuse (29.4%) and chronic disease (29.1%) were the top 3 health problems.
- Among RBMC-PA Service Area residents, obesity (46.8%), access to health care (32.9%) and substance abuse (28.7%) were the most important health problems in the community.

Figure 5.33
In The Following List, What Do You Think Are The Three Most Important
"Health Problems" In Your Community?
(If needed: Those problems that have the greatest impact on overall community health.)
Showing Top 10 mentioned responses.

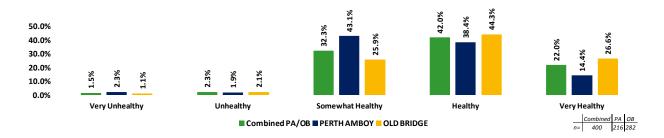


- 64% of Combined Service Area respondents believe their community is a healthy or very healthy place to live.
- 70.9% of RBMC-OB Service Area resident surveyed state that their community is a healthy or very healthy place to live compared to 52.8% of RBMC-PA Service Area residents.

Figure 5.34

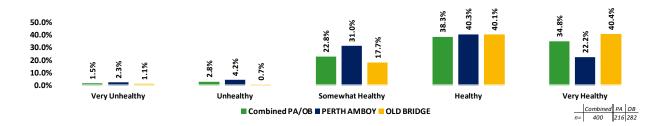
How Would You Rate Your Community As A Healthy Community To Live In?

Would You Say... (Choose one)



- 73.1% of Combined Service Area respondents identify their community as a healthy or very healthy place to raise children.
- 80.5% of RBMC-OB Service Area residents surveyed indicated that their community is a healthy or very healthy place to raise children compared to 62.5% of RBMC-PA Service Area residents.

Figure 5.35
How Would You Rate Your Community As A Safe Place To Grow Up Or To Raise Children?
Would You Say... (Choose one)

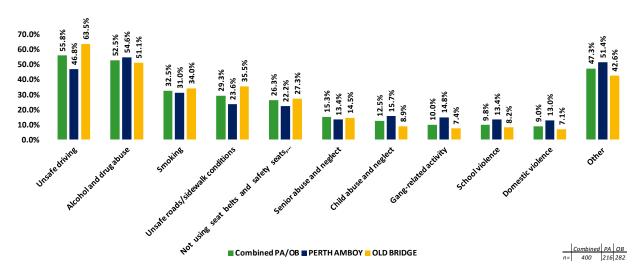


## Safety

Safety concerns varied between RBMC-PA and RBMC-OB Service Area respondents.

- Unsafe driving was selected by 55.8% of the Combined Service Area sample as the leading safety concern.
- The Combined Service Area respondents identified alcohol/substance abuse (52.5%) and smoking (32.5%) as priority safety concerns.
- The top 3 safety problems among RBMC-OB Service Area respondents were: unsafe driving (63.5%), alcohol and substance abuse (51.1%) and unsafe roads and sidewalks (35.5%).
- RBMC-PA Service Area respondents identified alcohol/substance abuse (54.6%), unsafe driving (46.8%) and smoking (31%) as the top 3 safety problems in the community.

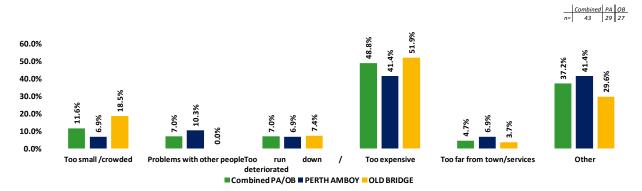
Figure 5.36
In The Following List, What Do You Think Are The Three Most Serious Safety Problems
For People In Your Community?



## **Housing**

- 10.8% of Combined Service Area respondents were dissatisfied with their housing situation compared to 13.4% of RBMC-PA Service Area participants.
- Cost was the primary reason for housing dissatisfaction in all service areas (Combined 48.8%, RBMC-PA 41.4%, RBMC-OB 51.9%).
- Residence being too small or crowded was the second most frequent reason for dissatisfaction
  with housing among RBMC-OB Service Area (18.5%) respondents as opposed to problems with
  other people for RBMC-PA Service Area (10.3%) respondents.

Figure 5.37
Are You Satisfied With Your Housing Situation? (Why not?)



## 6. ASSETS & GAPS ANALYSIS

The analysis of assets and gaps for the Middlesex County/Raritan Bay Medical Center Service Areas highlights health outcomes and health factors which performed well and those that require improvement. The asset and gap analysis integrates information from the Middlesex County Service Area Health Profile and includes secondary source data analysis, resource inventories, consumer survey responses and meetings with the Community Benefits Task Force.

## Premature Deaths, Leading Causes of Death & Behavioral Health-Related Deaths

#### Assets

- Middlesex County YPLL in 2008-2010 was 4,623, lower than the County Health Rankings national benchmark (CHR) of 5,636.
  - Middlesex County experienced a 10.4% reduction in premature death from 2004-2006 to 2008-2010.
  - Since 2004, premature deaths in Middlesex County have been consistently below those in the State and surrounding counties.
- 2009 Middlesex County rates of death due to unintentional injury were 21.6% lower than the Healthy People 2020 target of 36/100,000.
- The 2009 Middlesex County stroke age adjusted mortality rate (AAMR) (27.2/100,000) is 16% lower than the New Jersey stroke AAMR (32.4/100,000) and 19.5% lower than the *Healthy People 2020* target rate (33.8/100,000).
  - o The Middlesex County stroke AAMR decreased 21.6% from 34.7/100,000 in 2005 to 27.2/100,000 in 2009.
- The 2009 Middlesex County suicide rate is 28.4% lower than the *Healthy People 2020* target (10.2/100,000).

## Gaps

- Middlesex County deaths due to heart disease (177.4/100,000) exceed the *Healthy People 2020* target (108.8/100,000) by 63%.
  - o In 2009, Whites had the highest mortality rate for heart disease in Middlesex County at 193.0/100,000.
- The 2009 Middlesex County AAMR for cancer (170.7/100,000) exceeds the *Healthy People 2020* target (160.6/100,000) by 6.3%.
  - In 2009, deaths due to cancer in New Jersey, Middlesex County and surrounding counties are highest among Black, non-Hispanics.
  - o In 2009, cancer deaths to Black, non-Hispanics (215.9/100,000) exceeded the *Healthy People 2020* target by 56.8%.

## Infant Mortality and Low Birth Weight Infants

## Assets

• The 2009 Middlesex County infant mortality rate (3.0/1,000) is 41.2% lower than the State (5.1/1,000) and 50% less than the *Healthy People 2020* target (6.0/1,000).

#### Gaps

- In 2010, 8.4% of Middlesex County babies were low birth weight (less than 2500 grams), exceeding the *Healthy People 2020* target of 7.8%.
  - More 2010 Middlesex County (8.4%) babies were born with low birth weight than those in New Jersey (8.2%).
  - o In 2010 there were 51.9% more Black low birth weight infants in Middlesex County (11.7%) than Whites (7.7%).
  - o In 2010, the disparity between Middlesex County Black and White very low birth weight babies was 4.1% compared to 1.1%.

#### General Health Status and Behavioral Health Status

#### <u>Assets</u>

## **Gaps**

- 2011 Middlesex County BRFSS data on "poor or fair" health (16.3%) exceeds the CHR benchmark (10%) by 63%.
  - BRFSS data reported a 4.1 point increase between 2007 (12.2%) and 2011 (16.3%) of Middlesex County residents who indicate their health as "poor or fair."
  - In 2014, slightly more survey respondents indicated their general health status is fair or poor (RBMC-PA 20.8%, Combined 19%, RBMC-OB 17%) than Middlesex County (16.3%) 2011 BRFSS data.
  - RBMC-PA Service Area (20.8%) survey respondents who indicated fair or poor health status was double the CHR national benchmark (10%).
- BRFSS reported that the age-adjusted Middlesex County number of physically unhealthy days in the last 30 days was 3.0 from 2006 through 2012, not meeting the CHR national benchmark of 2.5.
- The Middlesex County 2006-2012 average number of mentally unhealthy days (3) surpasses the CHR benchmark (2.4).

## Morbidity

## <u>Assets</u>

#### Gaps

- The Middlesex County rate for heart disease is among the highest in New Jersey.
  - According to 2010 BRFSS, 4.4% of Middlesex County residents reported being told they had heart disease compared to 3.9% in New Jersey.
  - o Between 2007 (2.7%) and 2010 (4.4%), the adult population reporting diagnosis of angina or coronary heart disease increased 1.7 percentage points.
  - O Diagnosis of coronary heart disease in the Combined Service Area (5%) was 13.6% more frequent than Middlesex County (4.4%) 2010 BRFSS data.
    - Of those survey respondents diagnosed with angina in the RBMC-PA Service Area, 28.6% are not receiving treatment.

- Survey respondents in all service areas (Combined PSA 36.5%, RBMC-PA 34.3%, RBMC-OB 37.6%) exceeded Middlesex County (26.5%), New Jersey (30.6%) 2011 BRFSS data and the *Healthy People 2020* target (26.9%) for hypertension.
  - 7.5% of Survey respondents with high blood pressure in the Combined Service Area and in the RBMC-OB Service Area are not receiving treatment.
  - 9.5% of RBMC-PA Service Area respondents diagnosed with high blood pressure are not getting the care they need.
- Survey participants who have suffered a Myocardial Infarction (Combined PSA 5%, RBMC-PA 4.6%, RBMC-OB 5.3%) far exceeded Middlesex County (2.6%) 2010 BRFSS data.
  - o In 2010, 31.6% fewer Middlesex County (2.6%) residents were told they had a heart attack than across the state (3.8%).
  - Middlesex County heart attack hospital use rates (2009-2012) are lower than those in the hospital service areas (combined, RBMC PA, RBMC OB).
  - Perth Amboy residents exhibited the highest hospital utilization rate for heart attacks in 2011, 1.72/1,000.
- Between 2009 and 2012, hospital utilization rates for heart failure in Middlesex County are lower than the hospital service areas, Perth Amboy and Old Bridge ZIP codes.
  - o Perth Amboy residents exhibited the highest hospital utilization rate for heart failure/CHF, 4.07/1,000 in 2010 and Middlesex County residents reported the lowest rate, 2.85/1,000 in 2011.
- From 2009 through 2012, Perth Amboy had the highest hospital utilization rate for stroke/TIA compared to the RBMC service areas, Old Bridge and Middlesex County.
  - Survey participants diagnosed with asthma in the Combined Service Area (11.8%), RBMC-PA Service Area (13.4%) and RBMC-OB Service Area (11.3%) exceeded Middlesex County (7.5%) 2010 BRFSS data, New Jersey (8.7%) and the U.S. (9.1%).
- Middlesex County's overall invasive cancer incidence (465.5/100,000) is almost three times greater than *Healthy People 2020* target (161.4/100,000).
  - Hospital use rates for cancer patients per 1,000 population are highest in the RBMC-OB service area from 2009 through 2012.
  - Hospital use rates for residents with a history of cancer are greatest in the RBMC-OB service area from 2009 through 2012.
- Hospital use rates for residents with COPD are higher in the Combined RBMC Service Area than in Middlesex County.
- The Middlesex County rate for diabetes is among the highest in New Jersey.
  - Diabetes has been on the rise among Middlesex County residents. Between 2007 (8.2%) and 2010 (9.7%), the percentage of County residents reported having the disease rose by 1.5 percentage points. New Jersey residents with diabetes remained constant from 2007 to 2010 at 9.2%.
  - Diabetes diagnosis reported by survey participants (2014) (Combined PSA 17.3%, RBMC-PA 15.7%, RBMC-OB 18.8%) far exceeded Middlesex County (9.7%) 2010 BRFSS data.
    - 15.9% of Combined Service Area survey respondents with diabetes are not receiving treatment.
    - 18.9% of RBMC-OB Service Area respondents diagnosed with diabetes are not getting the care they need.

• Hospital utilization rates among patients with renal failure increased 50% in Perth Amboy from 1.7/1,000 in 2009 to 2.6/1,000 in 2012.

#### Socio-demographic and Economic Factors

#### Assets

- Between 2010 and 2014, New Jersey, Middlesex County, Edison, Old Bridge and Woodbridge experienced at least a 25% reduction in unemployment.
- As of December 2013, .4% of Middlesex County residents were receiving Work First NJ/TANF benefits, 60% fewer than statewide (1%).
  - As of December 2013, 1.3% of Middlesex County children were receiving Work First NJ/TANF benefits, 55.2% fewer than statewide (2.9%).
- Middlesex County 2012 median household income (\$79,442) exceeded the New Jersey median household income (\$71,637) by \$7,805 or 10.8%.

## Gaps

- Perth Amboy 2012 median household income is \$34,338 (43.2%) less than Middlesex County.
  - o In 2011, of 110 mid-sized municipalities with populations between 20,000 and 65,000 people, Perth Amboy had the fifth highest overall poverty level (43.8%), incomes below 200 percent the FPL, sixth highest (56.3%) percent of children below 200% FPL and fifth highest poverty level (46.2%) for the elderly population.
  - o The 2012 ACS Survey reports 17% of Perth Amboy families and 11.9% of Carteret families were living below the FPL compared to 5.4% in Middlesex County overall.
- The percent of Middlesex County residents (11.2%) without a high school diploma in 2012 was five times greater than the *Healthy People 2020* target (2.1%).
  - o In 2012, City of Perth Amboy (31.1%) had three times the percent of residents with less than a high school education than Middlesex County (11.2%).
- English proficiency rates in Middlesex County are among the poorest in the State.
  - In 2012, according to the U.S. Census, 24.4% more Middlesex County residents over age
     (16.4%) reported speaking English as "less that very well" than across New Jersey
     (12.4%).
  - o Middlesex County experienced a 22% increase in population that reported limited English proficiency between 2000 (13.4%) and 2012 (16.4%).

#### **Access to Care**

## Assets

- In 2011, Middlesex County (1071:1) exceeded the CHR national benchmark (1051:1) for primary care providers by 20:1.
  - o Between 2008 and 2011, the number of primary care physicians in Middlesex County increased over 350 primary care doctors.
- The 2012 Middlesex County adult ED ACSC rate (42.2/1,000) was 24.6% lower than the State rate (56/1,000).
- In 2012, Middlesex County (18.2/1,000) had 13.6% fewer ASCS inpatient admissions than the State (21.1/1,000).

- o Middlesex ranked 16 of 21 counties with 18.2/1,000 ACSC inpatient admissions in 2012.
- Middlesex County inpatient admissions from ACSC declined 4.2% from 19/1,000 in 2010 to 18.2/1,000 in 2012.

#### Gaps

- Middlesex County (15%) had 36% more residents under age 65 without health insurance than the CHR national benchmark (11%).
  - In 2011, 15% of persons under age 65 living in Middlesex County and New Jersey lacked health insurance.
- Lack of health coverage for Middlesex County residents (13.2%) in 2011 far exceeds the *Healthy People 2020* target of no person without health coverage.
  - o Middlesex County (13.2%), New Jersey (15%) and all service areas (Combined 15%, RBMC-OB 13.8%) had similar percentages of people lacking health care coverage.
  - o Forty percent more RBMC-PA (18.5%) Service Area respondents were without health care coverage than Middlesex County (13.2%) residents.
- 15.3% Combined Service Area respondents did not identify one individual as their health care provider.
  - 18.5% of RBMC-PA survey respondents do not have a primary doctor or health care provider.
  - o Four percent of Combined Service Area residents surveyed did not visit a doctor for routine services in greater than five years.
- Within the past year, approximately two-thirds of survey participants received health services outside their local communities.
  - o Lab work, x-ray/MRI and dental care were the Top 3 services sought outside the area.
  - o Practitioner location was cited as the primary reason for seeking care outside the community.
  - Other reasons individuals received care outside the community was "lack of availability of physicians for the required service" and "inability to find a good provider."
- Perth Amboy's NSI CHI score (5/552) indicated highest need in the Combined Service Area followed by Carteret (72), Old Bridge (85), East Brunswick (90) and Monroe (98).
- Among adults age 18+ in the RBMC-PA Service Area, the 2012 ED ACSC rate was 55.5/1,000 compared to 56/1,000 in New Jersey and 42.2/1,000 in Middlesex County.
- The City of Perth Amboy had the highest 2012 ED ACSC rate at 98.7/1,000.
- The 2012 pediatric ED ACSC rate in Perth Amboy (232/1,000) was the highest in the Combined Service Area and was more than 2 ½ times the Middlesex County (88/1,000) and New Jersey (83.3/1,000) rates.
  - o In 2012, 18.7% more Middlesex County children (55.7/1,000) visited the ED for an ENT related ACSC than statewide (45.3/1,000).
    - ♦ Middlesex County pediatric ENT visits increased 13% between 2010 (49.3/1,000) and 2012 (55.7/1,000).

#### **Clinical Care Measures**

## **Assets**

#### Gaps

- Raritan Bay Medical Center 2012 Service Area inpatient utilization rates (164.3/1,000) were 14.1% higher than Middlesex County rates (144/1,000) and 3.8% higher than State rates (158.3/1,000).
- Monroe Township's (215.1/1,000) older population drives an inpatient use rate, 49% higher than Middlesex County (144/1,000) in 2012.
- Raritan Bay Medical Center 2012 Combined Service Area (301.9/1,000) ED visit rate exceeded Middlesex County (285.2/1,000) by 5.9%.
  - 2012 Perth Amboy ED visit rates (592.5/1,000) were more than double Middlesex County rates.
- The Middlesex County rate for primary C-section is among the highest in New Jersey.
  - The 2010 Middlesex County primary C-section rate (20.9%) was 6% greater than the State rate (19.6%).
  - In 2010, primary C-section rates in Englishtown (50%) and Helmetta (52.9%) far exceeded Middlesex County (20.9%), New Jersey (19.6%) and Healthy People 2020 target (23.9%) rates.
  - o Englishtown, Matawan and Monroe had 100% repeat C-section rates in 2010.
  - o The Middlesex County (92.2%) 2010 repeat C-section rate is 12.9% higher than the *Healthy People 2020* target (81.7%).

#### **Health Behaviors**

## Maternal /Fetal Health and High Risk Sexual Behaviors

#### Assets

- In 2010, Middlesex County women exceeded the Healthy People 2020 target 77.9% women enrolled in first trimester care by 10.5%.
  - o 6.7% More Middlesex County women enrolled in first trimester prenatal care 2010 (86.1%) than in 2006 (80.7%).
  - o In 2010, 9.7% more Middlesex County (86.1%) women entered prenatal care in the first trimester than in New Jersey (78.5%).
- The Middlesex County rate of women not entered into prenatal care in 2010 is half the State rate of 1%.
  - The percent of Middlesex County women without prenatal care decreased 28.6% from .7% in 2006 to .5% in 2010.
- The 2006-2011 Middlesex County teen birth rate (aged 15-19) was 20% better than the CHR benchmark (20/1,000).
  - The 2006-2011 Middlesex County teen birth rate (aged 15-19) was 30% better than the State rate (23/1,000).
- From 2010-2012, Middlesex County (3.3/100,000) had 67% fewer cases of syphilis than New Jersey (10/100,000).
- From 2010-2012, Middlesex County (33.5/100,000) had 60.4% fewer cases of gonorrhea than New Jersey (84.6/100,000).

#### Gaps

- 2012 Birth rate to teens age 15-19 in Perth Amboy (56.8/1,000) was four times the Middlesex County rate (13.8/1,000).
- The rate of Chlamydia in Middlesex County (231.6/1,000) was almost double the CHR national benchmark (123/100,000).

## Tobacco, Alcohol & Drug Use

#### Assets

#### Gaps

- In 2011, Middlesex County exceeded the *Healthy People 2020* target of 12% of adults that smoke by 14.2%.
  - o Middlesex County smokers steadily increased from 12.6% in 2009 to 13.7% in 2011 despite a statewide decrease in this time frame from 17.1% to 16.8%.
- The 2011 number of Middlesex County (20%) residents who drank excessively (heavy or binge) was double the CHR national benchmark (10%).

#### Diet & Exercise

#### Assets

- In 2011, Middlesex County (22.4%) had 11.4% more residents who met standards for aerobic and strength training than *Healthy People 2020* target (20.1%).
- In 2011, 30.1% less Middlesex County residents (21.4%) were obese than the *Healthy People* 2020 target (30.6%).
- In 2011, 14.4% less Middlesex County residents (21.4%) had a BMI>=30 than the CHR national benchmark (25%).
  - o In 2011, there were 9.7% fewer Middlesex County residents (21.4%) with a Body Mass Index (BMI) >=30 than New Jersey residents overall (23.7%).

#### Gaps

- 2012 Hospital utilization rates among obese residents were highest in the City of Perth Amboy at 13.5/1,000 compared to 9.7 in Middlesex County.
  - Between 2009 and 2012 hospital utilization rates among obese patients were much higher in the RBMC-PA Service Area, RBMC-OB Service Area, Combined Service Area, Perth Amboy and Old Bridge than in Middlesex County overall.
- 28.6% more Middlesex County adults over age 20 indicated with no leisure-time physical activity (27%) than the CHR national benchmark (21%).
  - o In 2010, 8% more Middlesex County adults (27%) reported no leisure-time physical activity than adults throughout the State (25%).

## **Health Screenings & Vaccinations**

## <u>Assets</u>

- In 2010, 27.2% fewer Middlesex County women (21.1%) went without a mammogram in the last two years than the CHR national benchmark for noncompliance (29%).
  - o In 2010, 25% fewer Middlesex County women over age 40 (21.1%) did not have a mammography within the past two years than statewide (28%).

- o 6.1% fewer Middlesex County women went without a mammography in the last two years in 2010 (21.2%) than in 2008 (27.2%).
- Middlesex County reached the Healthy People 2020 target of 70.5% of adults (50+) ever having colon-rectal screening in 2010.
  - o In 2010, 7.5% more Middlesex County adults over age 50 (70.5%) participated in colon-rectal screening than adults across the State (65.6%).
  - o In 2010, 46.9% more Middlesex County adults (70.5%) over age 50 had a colonoscopy / sigmoidoscopy than in 2006 (48%).
  - In 2011, Middlesex County (26.5%) met the *Healthy People 2020* target (26.9%) for adults with high blood pressure.
    - O However, between 2007 and 2011, there was a slight increase of 3.5% in Middlesex County adults who had been told they have high blood pressure.
- In 2011, 26.5% of Middlesex County adults were aware that they suffered from hypertension, 13.4% fewer than New Jersey adults (30.6%).
- Most recent data available, 2007-08, indicates 79% of children aged 19-35 months received the
   4:3:1:3 vaccination series compared to 77% statewide.

## <u>Gaps</u>

- 6.7% Fewer Middlesex County diabetic Medicare enrollees (84%) were screened in 2011 than the CHR national benchmark (90%).
- In 2011, two and a half times more Middlesex County (34.7%) residents had high cholesterol than the *Healthy People 2020* target (13.5%).
  - o In 2011, 34.7% of Middlesex County adults who had their cholesterol checked were made aware that the results were high, 13.4% more than New Jersey adults (30.6%).
    - Survey participants diagnosed with high blood cholesterol (Combined PSA 33.5%, RBMC-PA 31%, RBMC-OB 36.2%) was similar to Middlesex County (34.7%) 2011 BRFSS data.
    - Survey respondents in all service areas (Combined PSA 33.5%, RBMC-PA 31%, RBMC-OB 36.2%) exceeded the *Healthy People 2020* target (13.5%) for high blood cholesterol.
      - ➤ 26.1% of Combined Service Area respondents diagnosed with high blood cholesterol are not taking medication to control it.
      - ➤ 31.3% of RBMC-PA Service Area respondents with high blood cholesterol are not getting the medication they need.
- 2011 Middlesex County residents over age 65 who failed to receive a flu shot in the past year (39.6%) was four times greater than the *Healthy People 2020* target (10%).
  - Middlesex County adults over age 65 who did not have a seasonal flu shot increased 46.1% from 2006 (27.1%) to 2011 (39.6%).
  - o In 2011, 2.3% more Middlesex County adults over 65 (39.6%) did not have a seasonal flu shot than statewide (38.7%).
- 2011 Middlesex County adults over age 65 (42.2%) were four times more likely to never have been vaccinated for pneumonia than the *Healthy People 2020* target (10%).
  - Middlesex County adults over age 65 who never had a pneumonia shot increased 131% from 2006 (18.2%) to 2011 (42.2%).

- o In 2011, 22.7% more Middlesex County residents over age 65 (42.2%) were never vaccinated for pneumonia than statewide (34.4%).
- 2012 Hospital utilization rates among patients with pneumonia were highest in the City of Perth Amboy at 6.7/1,000 compared to 5.1/1,000 in Middlesex County.

#### **Physical Environment**

#### Assets

- Twenty-seven percent of New Jersey homes were built prior to 1950 therefore posing possible lead hazards to their residents compared to 18% of Middlesex County homes.
  - o In 2009, .4% of Middlesex County children had elevated blood lead levels compared to .5% statewide.
  - Middlesex County reported a 42.9% decrease in children with elevated blood lead levels from 2007 (0.7%) to 2009 (0.4%).
- In 2011, Middlesex County (16/100,000) had 20% fewer liquor stores than New Jersey (20/100,000).
- Compared to New Jersey (2.5/1,000), Union (2.1/1,000) and Monmouth (2.9/1,000) counties, Middlesex County (1.9/1,000) had the lowest rate of domestic violence arrests in 2011.
  - o Between 2008 and 2011, the rate of domestic violence arrests in Middlesex County remained fairly consistent at 1.9/1,000.
- 2009 Middlesex County (5.8/1,000) car accident related deaths occurred 53.2% less often than the *Healthy People 2020* target (12.4/1,000).
  - o In 2009, Middlesex County (5.8/100,000) had 6.5% fewer motor vehicle crash deaths than New Jersey (6.2/100,000).
  - Deaths due to motor vehicle accidents decreased 20.5% in Middlesex County between 2007 (7.8/1,000) and 2009 (5.8/1,000).
- In 2009, Middlesex County (3.8/100,000) had 45.7% fewer deaths due to falls than the *Healthy People 2020* target (7/100,000).
  - The 2009 Middlesex County death rate due to falls (3.8/100,000) was the same as the New Jersey rate (3.8/100,000).
  - Middlesex County experienced a 26.7% decline in deaths due to falls between 2004 (3/100,000) and 2009 (3.8/100/000).
- Middlesex County had 32.8% fewer deaths due to accidental poisoning and exposure to noxious substances in 2009 than the *Healthy People 2020* target (13.1/100,000).

## <u>Gaps</u>

- In 2011, Middlesex County (11.1 PM2.5) exceeded the CHR national benchmark (9.5 PM2.5) by 16.8% for number of unhealthy air quality days.
- Middlesex County (4%) had four times the CHR national benchmark (1%) of low income residents that did not live near a grocery store.
  - o Four percent of New Jersey and Middlesex County low income residents did not live close to a grocery store in 2010.
- In 2010, Middlesex County (55%) had 50.9% more fast food establishments than the CHR national benchmark (27%).

- o In 2010, 55% of Middlesex County restaurants are fast food compared to 50% of restaurants in New Jersey.
- From 2009-2011, the Middlesex County (186/100,000) violent crime rate was three times greater than the CHR national benchmark (64/100,000).
- Accidental deaths as a result of poison and exposure to noxious fumes increased 43.2% from 2007 (5/100,000) to 2009 (8.8/100,000).
  - o In 2009, Middlesex County (8.8/10,000) had 8.6% more deaths due to accidental poisoning and exposure to noxious substances than statewide (8.1/100,000).

#### **Behavioral Health**

#### <u>Assets</u>

#### Gaps

- In 2012, inpatient mental health use rates in Perth Amboy (5.1/1,000) were similar to New Jersey rates (5.2/1,000) but exceeded Middlesex County rates (2.3/1,000) by 126%.
  - o In 2012, emergency department utilization rates for mental health in Perth Amboy (15.4/1,000) were 110.5% greater than the Middlesex County rate (7.3/1,000) and 49.8% greater than the New Jersey rate (10.3/1,000).
  - o In 2012, Middlesex County (2.3/1,000) had 55.8% fewer hospital admissions for mental health conditions than the State (5.2/1,000).
- 16% of Combined Service Area survey respondents indicated that they or someone in their family utilized mental health services within the past year.
  - Counseling and/or therapy was most utilized by those requiring mental health services,
     71.9% of Combined Service Area and 80.6% of RBMC-PA Service Area respondents.
  - 11.6% of RBMC-OB Service Area respondents who required mental health services were hospitalized.
  - o 11.1% of Perth Amboy Service Area respondents who received mental health services were for drug and alcohol compared to 4.7% in the Old Bridge Service Area.
- In 2012, emergency department utilization rates for substance abuse in Perth Amboy (12.53/1,000) were 141% greater than the Middlesex County rate (5.2/1,000) and 86.7% greater than the New Jersey rate (6.71/1,000).
  - In 2012, acute care hospital use rates for substance abuse in Perth Amboy (1.24/1,000) and Old Bridge (1.25/1000) were approximately 36% better than New Jersey rates (1.97/1,000).
  - o In 2012, Middlesex County (615.8/1,000) had 25.9% fewer residents admitted to any facility for substance abuse treatment than the State (830.5/1,000).
  - o Between 2008 (344.1/100,000) and 2012 (615.8/1,000), Middlesex County experienced a 79% increase in the rate of substance abuse treatment admissions.

## APPENDIX A SECONDARY DATA SOURCES

Source

**About Health** 

**American Cancer Society** 

Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS)

California Department of Public Health

CDC

**CDC BRFSS** 

CDC's National Center for Hepatitis, HIV, STD, and TB Prevention

**CDC National Vital Statistics Reports** 

CDC Office of Minority Health & Health Disparities

CDC Pediatric and Pregnancy Nutrition Surveillance System

County Health Rankings

FBI/Interuniversity Consortium for Political and Social Research (ICPSR) National Archive of Criminal Justice Data

Health Resources and Services Administration's Area Resource File

Healthy People 2020

Healthy People.gov

Legal Services of New Jersey

MedicineNet.com

Medline Plus

National Center for Chronic Disease Prevention and Health Promotion/CDC/BRFSS (CHR)

**National Center for Health Statistics** 

National Institute of Health; National Health, Lung and Blood Institute

National Vital Statistics System (NVSS), National Center for Health Statistics

**NCHS Ambulatory Care Survey** 

**New Jersey Cancer Registry** 

New Jersey Department of Health and Human Services

New Jersey Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment

New Jersey Department of Health and Senior Services, Center for Health Statistics

New Jersey Department of Health and Senior Services, County Health Profiles

New Jersey Department of Health and Senior Services, Division of Family Health Services

New Jersey Department of Labor

New Jersey Discharge Data Collection System

Planned Parenthood

**Robert Wood Johnson Foundation** 

Small Area Health Insurance Estimates/ACS/CPS ASEC

Small Area Income and Poverty Estimates (SAIPE)

State of New Jersey Department of Health; Childhood Lead Poisoning Prevention

TANF Program

#### Source

UB - 04 Hospital and Emergency Room Discharge Data - Multiple Years (NSI)

U.S. Census Bureau

**USDA Economic Research Service** 

**USDA Food Environment Atlas** 

USDA Food Environment Atlas/County Business Patterns

**USDA Food and Nutrition Service** 

U.S Department of Health and Human Services

U.S. Department of Health & Human Services; Agency for Healthcare Research and Quality

U.S. Department of Health & Human Services; HRSA

U.S. Department of Health & Human Services; Office of Adolescent Health

World Health Organization

# APPENDIX B SURVEY QUESTIONNAIRE

<u>INTR</u>	ODUCT	<u>ION</u>
woul Any i	ld be wil	and I'm calling on behalf of the healthcare providers in your area to see if you ling to answer a few questions about your health and the health of the local community. tion you give me will be confidential. Would you be willing to take a few minutes to share s?
(If re	sponde	nt answers yes, BEGIN THE SURVEY)
(If re	sponde	nt answers No, say: Thank you for your time Mr./Mrs, have a nice day.)
<u>SCRE</u>	ENING	QUESTIONS
Q1)	What is	your zip code?
Q2)	Are you	18 years of age or older?
. ,	a.	Yes <b>(Go To Q2.1)</b>
	b.	No (If the answer to Q2 is "No" thank them for their time and terminate the interview.)
	Q2.1	. Is there an adult in this household who is responsible for making health care decisions that
		I can speak with?
	a. b.	Yes <b>(Go To Q3)</b> No <b>(If the answer to Q2.1 is "No" thank them for their time and terminate the interview.)</b>
<u>HEAI</u>	LTH STA	<u>TUS</u>
Q3)	Would v	you say that in general your health is—?
` ,		se read:
	a.	Excellent
	b.	Very good
	C.	Good
	d.	Fair
	Or	
	e.	Poor
	Do n	oot read:
	f.	Don't know / Not sure
g.		Refused

- Q4) Do you have one person you think of as your personal doctor or health care provider?
  - a. Yes
  - b. No

(If "No," ask: "Is there more than one, or is there no person who you think of as your personal doctor or health care provider?")

- a. Yes, only one
- b. More than one
- c. No

#### Do not read:

- d. Don't know / Not sure
- e. Refused
- Q5) About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.
  - a. Within past year (read if necessary to clarify: anytime less than 12 months ago)
  - b. Within past 2 years (read if necessary to clarify: 1 year but less than 2 years ago)
  - c. Within past 5 years (read if necessary to clarify: 2 years but less than 5 years ago)
  - d. 5 or more years ago

#### Do not read:

- e. Don't know / Not sure
- f. Never
- g. Refused

## **DISEASE HISTORY**

Q6) Have you ever been told by a doctor, nurse other health care professional that you have any of the following conditions: (Repeat before each health concern)

#### Diabetes?

If respondent says pre-diabetes or borderline diabetes, use response code d.

- a. Yes
- b. No [Go to Q8]
- c. Told borderline high or pre-hypertensive [Go to Q8]
- d. Don't know / Not sure [Go to Q8]
- e. Refused [Go to Q8]
- Q7) If yes, Are you getting treatment for diabetes now?
  - a. Yes
  - b. No
  - c. Don't Know/Not Sure
  - d. Refused

Q8) H	B) Have you ever been told by a doctor, nurse other health care professional that you have:								
	High	blood pressure?							
	a. b. c. d. e.	Yes No [Go to next Q10] Told borderline high or pre-hypertensive [Go to Q10] Don't know / Not sure [Go to Q10] Refused [Go to Q10]							
Q9) <b>If</b>	Yes, and a. b. c. d.	re you getting treatment for high blood pressure now? Yes No Don't Know/Not Sure Refused							
Q10)	High Y N D	blood cholesterol? es to (Go to Q12) on't know / Not sure (Go to Q12) efused (Go to Q12)							
Q11)	a. b. c. d.	are you taking medication for high cholesterol now? Yes No Don't know / Not sure Refused							
Q12)	·	ou ever been told by a doctor, nurse other health care professional that you have:  a heart attack, also called a myocardial infarction?  Yes  No  Don't know / Not sure  Refused							

Q13) Have you ever been told by a doctor, nurse other health care professional that you have:

#### Angina or coronary heart disease?

- a. Yes
- b. No
- c. Don't know / Not sure
- d. Refused
- Q14) If yes to either Q12 or Q13 or both, Are you getting treatment for heart disease now?
  - a. Yes
  - b. No (Go to Q15)
  - c. Don't Know/Not Sure (Go to Q15)
  - d. Refused (Go to Q15)
- Q15) Have you ever been told by a doctor, nurse other health care professional that you have:

#### Asthma?

- a. Yes
- b. No **[Go to Q17]**
- c. Don't know / Not sure [Go to Q17]
- d. Refused [Go to Q17]
- Q16) If yes, Are you getting treatment for asthma now?
  - a. Yes
  - b. No
  - c. Don't Know/Not Sure
  - d. Refused

## **HEALTHY COMMUNITIES**

- Q17) In the following list, what do you think are the <u>three</u> most important factors that define a "Healthy Community" (those factors that most affect the quality of life in a community).
  - a. Community Involvement
  - b. Low crime / safe neighborhoods
  - c. Good Schools
  - d. Access to health care & other services
  - e. Parks and recreation
  - f. Preventive health care education
  - g. Affordable housing
  - h. Tolerance for diversity

- i. Good jobs and healthy economy
- j. Strong family life
- k. Healthy behaviors and lifestyles
- I. Low death and disease rates
- m. Religious or spiritual values
- n. Arts and cultural events
- o. Clean and Healthy Environment
- p. Other\_\_\_\_\_

- Q18) In the following list, what do you think are the **three** most important "health problems" in your community? (Those problems that have the greatest impact on overall community health.)
  - Lack of Access to Healthcare (clinics in the evening hours, school-based care, etc.)
  - b. Mental health issues
  - c. Homicide
  - d. Child abuse / neglect
  - e. Suicide
  - f. Teenage pregnancy
  - g. Domestic violence
  - h. Firearm-related injuries
  - i. Nutrition (obesity)
  - j. Sexually Transmitted Disease (HIV, herpes,etc.)

- k. End of Life Care
- I. Infectious Diseases (TB, hepatitis, etc.)
- m. Food Borne Diseases
- n. Substance Abuse
- o. Sexual Assault/Rape
- p. Chronic Diseases (cancer, heart, lungs, diabetes, high blood pressure)
- q. Aging problems (arthritis, hearing/vision loss)
- r. Tobacco Use
- s. Homelessness
- t. Undocumented Immigrant Population
- u. Other\_\_\_\_
- Q19) How would you rate your community as a healthy community to live in? (Choose one)
  - a. Very Unhealthy
  - b. Unhealthy
  - c. Somewhat Healthy
  - d. Healthy
  - e. Very Healthy
- Q20) How would you rate your *community* as a safe place to grow up or to raise children? (Choose one)
  - a. Very Unhealthy
  - b. Unhealthy
  - c. Somewhat Healthy
  - d. Healthy
  - e. Very Healthy
- Q21) In the following list, what do you think are the **three** most serious safety problems for people in your *community*?
  - a. Unsafe driving
  - b. Alcohol and drug abuse
  - c. Racism & intolerance
  - d. Not using seat belts and safety seats, helmets
  - e. Unsafe/unprotected sex
  - f. Unsafe roads/sidewalk conditions
  - g. Access to firearms by children
  - h. Smoking

- i. Manufacturing of methamphetamines
- j. Growing Marijuana
- k. School violence
- I. Child abuse and neglect
- m. Domestic violence
- n. Gang-related activity
- o. Senior abuse and neglect
- p. Other\_\_\_\_\_

## **HEALTH NEEDS AND ACCESS**

Q22) Within the past year, what type of health services did you or anyone living in your home receive

<b></b> γ	out	tside your community?	,	
	Circ	cle all numbers that apply:		
	a.	None	k.	Immunizations
	b.	Lab work	l.	General Practitioner care
	c.	General Surgery	m.	Mental health services
	d.	Urology care	n.	Eye Care
	e.	Ear, Nose, Throat Care	0.	Orthopedic/Bone care
	f.	Podiatry Care	p.	Cardiac/Heart Care
	g.	X-Ray/MRI	q.	Dental Care
	h.	Hearing services	r.	Orthodontia
	i.	Family Planning	s.	Obstetrics/Gynecology
	j.	Emergency room service	t.	Other
	a. b. c. d. e. f.	ou got health care <b>outside</b> your <i>community</i> , why? My doctor is in another city. No doctors or providers for services I need. No doctors that speak my language. My insurance only covers doctors in another area No appropriate doctors accept Medicaid. Could not find a good provider. Other		
Q24)	a.	thin the past year, did you or anyone in your family  No ( <b>If No,</b> please go to Q35)  Yes	rec	juire any type of mental health services?
Q25)	-	<b>Yes,</b> what type of service was utilized? ( <u>Circle <b>all</b> nu</u> Crisis Care	<u>umb</u>	ers that apply))
		Hospitalization		
		Counseling/Therapy		
		Drug & Alcohol		
		-		
	c.	Other		-
Q26)	Wh	nere did you go for services? (Please explain/descri	be)	

Q27)	7) Within the past year, what type of social service benefits did you or anyone in your family need?									
	Circ	cle <b>all</b> numbers that apply:								
		None	f.	Medicaid						
	b.	Food Stamps	g.	Respite Care						
		NJ FamilyCare	h.							
	d.	General Assistance	i.	Charity Care						
	e.	Housing Assistance	j.	Other						
Q28)	a.	ou needed social benefits, were you able to get the Yes No	m in	your community?						
Q29)	hor	thin the past year, have any of your family/friends n me, rehab, etc.)? Yes	eede	ed long-term care placement (nursing						
		No								
	٠.									
Q30)	If y	es, why was there any difficulty obtaining placemer	nt? Pl	ease describe / explain:						
O31)	Are	you satisfied with your housing situation?								
		Yes								
	b.	No								
Q32)		o, why not? (Circle all numbers that apply) Too small /crowded								
		Problems with other people								
		Too run down / deteriorated								
		Too expensive								
		Too far from town/services								
	f.	Other								

## **DEMOGRAPHICS**

The last few questions are needed for classifying responses and are strictly confidential.

Q33)	Gender (	(DO NOT	ASK – J	IUST EN	ITER CC	DRRECT A	ANSWER

- a. Male
- b. Female

## Q34) What is your age?

- a. 18 34
- b. 35 44
- c. 45 54
- d. 55 64
- e. 65 74
- f. 75 or over
- g. I prefer not to answer

## Q35) What group do you most identify with?

- a. African American/Black
- b. White/Caucasian
- c. Asian
- d. Hispanic/Latino
- e. Other

#### Q36) Are you currently employed? (Circle one)

- a. Not employed
- b. Self-employed
- c. Employed part-time \_\_\_\_\_ (hours per week)
- d. Employed full-time

## Q37) If not employed, what is the main reason you are not working? (Circle one)

- a. Sick or disabled
- b. Cannot find work
- c. Retired
- d. Taking care of family
- e. Need training
- f. Other\_\_\_\_

## Q38) Is your total household income?

- a. Less than \$25,000
- b. \$25,000 \$50,000
- c. \$50,000 \$100,000
- d. Over \$100,000
- e. I prefer not to answer

- Q39) Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare or Medicaid?
  - a. Yes
  - b. No
  - c. Don't know / Not sure
  - d. Refused
- Q40) If yes, what type health care coverage of do you have?
  - a. Medicare
  - b. Medicaid
  - c. Commercial Insurance (this would include PPO or HMO through Blue Cross Blue Shield, United Healthcare, Aetna...)
  - d. Other\_\_\_\_\_
- Q41) How long have you lived in the local area (define area for respondent)?
  - a. Less than 1 year
  - b. 1-3 years
  - c. 3-10 years
  - d. More than 10 years
  - e. I prefer not to answer

## APPENDIX C RESOURCE INVENTORY

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	After Hours Clinic	ASC of Union	950 West Chestnut Street	Union	07083	(908) 688-2700	Union	
Clinical Care Provider Location	After Hours Clinic	Kinder Pediatric Urgent Care	530 Green Street	Iselin	08830	(732) 371-4400	Middlesex	
Clinical Care Provider Location	Dental Clinic	Jewish Renaissance Medical Center	275 Hobart Street	Perth Amboy	08861	(732) 376-9333	Middlesex	RBMC PA
Clinical Care Provider Location	Dental Clinic	Elizabeth Department of Health & Human Services	50 Winfield Scott Plaza	Elizabeth	07201	(908) 820-4049	Union	
Clinical Care Provider Location	Dental Clinic	Eric B. Chandler Health Center	277 George Street	New Brunswick	08901	(732) 235-6700	Middlesex	
Clinical Care Provider Location	Dental Clinic	Eric B. Chandler Health Center	123 Church Street	New Brunswick	08901	(732) 235-2052	Middlesex	
Clinical Care Provider Location	Dental Clinic	Eric B. Chandler Health Center - New Brunswick High School	1000 Somerset Street	New Brunswick	08901	(732) 235-7435	Middlesex	
Clinical Care Provider Location	Dental Clinic	Jersey Shore University Medical Center	1828 West Lake Avenue	Neptune	07753	(732) 869-5736	Monmouth	
Clinical Care Provider Location	Dental Clinic	John F. Kennedy Medical Center	65 James Street	Edison	08820	(732) 321-7608	Middlesex	
Clinical Care Provider Location	Dental Clinic	Middlesex County College	2600 Woodbridge Avenue	Edison	08818	(732) 906-2536	Middlesex	
Clinical Care Provider Location	Dental Clinic	Monmouth Family Health Center	300 Second Avenue	Long Branch	07740	(732) 923-6585	Monmouth	
Clinical Care Provider Location	Dental Clinic	Neighborhood Health Services Corp.	184 First Street	Elizabeth	07206	(908) 355-4459	Union	
Clinical Care Provider Location	Dental Clinic	Neighborhood Health Services Corp.	1700 Myrtle Avenue	Plainfield	07063	(908) 753-6401	Union	
Clinical Care Provider Location	Dental Clinic	Overlook Medical Center	99 Beauvoir Avenue	Summit	07902	(908) 522-2901	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	Dental Clinic	Robert Wood Johnson University Hospital	1 Robert Wood Johnson Place	New Brunswick	08901	(732) 937-8653	Middlesex	
Clinical Care Provider Location	Dental Clinic	Rutgers University - School of Health Related Professions, Dental Center	1776 Raritan Road	Scotch Plains	07076	(908) 889-2410	Union	
Clinical Care Provider Location	Federally Qualified Health Center	Monmouth Family Health Center	270 Broadway	Long Branch	07740	(732) 413-2030	Monmouth	
Clinical Care Provider Location	Federally Qualified Health Center	Monmouth Family Health Center	300 Second Avenue	Long Branch	07740	(732) 413-2030	Monmouth	
Clinical Care Provider Location	Federally Qualified Health Center	Women's Wellness Center of the Monmouth Family Health Center	80 Pavillion Avenue	Long Branch	07740	(732) 413-2030	Monmouth	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Jewish Rennaissance Medical Center	272A Hobart Street	Perth Amboy	08861	(732) 376-9333	Middlesex	RBMC PA
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	JRMC-Perth Amboy High School	300 Eagly Avenue	Perth Amboy	08861	(732) 376-6030	Middlesex	RBMC PA
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Perth Amboy Center for the Elderly	415 Fayette Street	Perth Amboy	08861	(732) 324-0500	Middlesex	RBMC PA
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Eric B. Chandler Health Center	277 George Street	New Brunswick	08901	(732) 235-6700	Middlesex	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Eric B. Chandler Health Center at New Brunswick High School	1000 Somerset Street	New Brunswick	08901	(732) 235-7435	Middlesex	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Eric B. Chandler Health Center Church Street Annex	123 Church Street	New Brunswick	08901	(732) 235-2052	Middlesex	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield	1700-58 Myrtle Avenue	Plainfield	07063	(908) 753-6401	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield - Cardinal	950 Park Avenue	Plainfield	07060	(908) 754-5840	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield - Clinton Elementary School	Clinton Avenue & W. 4th St.	Plainfield	07060	(908) 732-4288	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield - Elizabeth	250-254 Second Street	Elizabeth	07206	(908) 355-4459	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield - Jefferson Elementary School	1200 Myrtle Avenue	Plainfield	07063	(908) 732-4288	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield - Stillman Elementary School	201 W. 4th Street	Plainfield	07060	(908) 731-4288	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Neighborhood Health Center Plainfield - The Healthy Place	427 Darrow Avenue	Plainfield	07060	(908) 731-4288	Union	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Visiting Nurse Association of Central Jersey Community Health Center	1301 Main Street	Asbury Park	07712	(732) 774-6333	Monmouth	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Visiting Nurse Association of Central Jersey Community Health Center - Keansburg Community Health Center	100 Main Street	Keansburg	07734	(732) 787-1250	Monmouth	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Visiting Nurse Association of Central Jersey Community Health Center - Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732) 888-4149	Monmouth	
Clinical Care Provider Location	Health Center (Not listed as FQHC on FQHC website)	Visiting Nurse Association of Central Jersey Community Health Center - Red Bank Community Health Center	176 Riverside Avenue	Red Bank	07701	(732) 219-6620	Monmouth	
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	330 Rues Lane	East Brunswick	08816	(866) 389-2727	Middlesex	RBMC OB
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	253 Gordon Corner Road	Manalapan	07726	(732) 536-0400	Monmouth	RBMC OB
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	2988 Highway 516	Old Bridge	08857	(732) 607-2940	Middlesex	RBMC PA/OB
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	3391 State Route 35	Hazlet	07730	(866) 389-2727	Monmouth	
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	4 Ryan Road	Marlboro	07746	(732) 431-8700	Monmouth	
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	4 Schalks Crossing Road	Plainsboro	08536	(609) 275-9312	Middlesex	
Clinical Care Provider Location	Minute Clinic	CVS Minute Clinic	178 Morris Avenue	Springfield	07081	(973) 389-8771	Union	•

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	Primary Care	Advanced Primary Care	346 South Avenue	Fanwood	07023	(908) 889-8700	Union	
Clinical Care Provider Location	Primary Care	Associates in Primary Care PA	194 State Route 79 North	Marlboro	07746	(732) 379-3069	Monmouth	
Clinical Care Provider Location	Primary Care	Complete Primary Care	1810 Park Avenue	South Plainfield	07080	(908) 226-1810	Middlesex	
Clinical Care Provider Location	Primary Care	Definite Primary Care	1767 Morris Avenue	Union	07083	(908) 258-7405	Union	
Clinical Care Provider Location	Primary Care	East Brunswick Primary Care Pa	98 James Street	Edison	08820	(732) 603-0055	Middlesex	
Clinical Care Provider Location	Primary Care	Eatontown Primary Care	117 State Route 35	Eatontown	07724	(732) 542-4411	Monmouth	
Clinical Care Provider Location	Primary Care	Hudson Primary Care Association	3000 Hadley Road	South Plainfield	07080	(908) 668-6874	Middlesex	•
Clinical Care Provider Location	Primary Care	Navesink Primary Care	200 White Road	Little Silver	07739	(732) 530-0070	Monmouth	
Clinical Care Provider Location	Primary Care	NJ Primary Care Association	145 Talmadge Road	Edison	08817	(732) 287-6228	Middlesex	
Clinical Care Provider Location	Primary Care	Ocean Primary Care Associates	842 Broadway	West Long Branch	07746	(732) 222-0180	Monmouth	
Clinical Care Provider Location	Primary Care	Primary Care Associates	802 Old Springfield Avenue	Summit	07901	(908) 273-5644	Union	
Clinical Care Provider Location	Primary Care	South Plainfield Primary Care	2509 Park Avenue	South Plainfield	07080	(908) 756-5207	Middlesex	
Clinical Care Provider Location	Primary Care	VNA Keyport Primary Care Center	35 Broad Street	Keyport	07735	(732) 888-4149	Monmouth	
Clinical Care Provider Location	Urgent Care	Brunswick Urgent Care	641 Route 18 South	East Brunswick	08816	(732) 955-6765	Middlesex	RBMC OB
Clinical Care Provider Location	Urgent Care	Marlboro Medical Center	203 U.S. Highway South	Morganville	07726	(732) 617-8800	Monmouth	RBMC OB
Clinical Care Provider Location	Urgent Care	Care Station	328 West St. Georges Avenue	Linden	07036	(908) 925-2273	Union	
Clinical Care Provider Location	Urgent Care	Care Station	90 Route 22 West	Springfield	07081	(973) 467-2273	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	Urgent Care	Central Jersey Urgent Care	731 Highway 35	Ocean	07712	(732) 455-8444	Monmouth	
Clinical Care Provider Location	Urgent Care	Concentra	135 Raritan Center Pkwy	Edison	08837	(732) 225-5454	Middlesex	
Clinical Care Provider Location	Urgent Care	Concentra	595 Division Street	Elizabeth	07201	(908) 289-5646	Union	
Clinical Care Provider Location	Urgent Care	Concentra	116 Corporate Boulevard	South Plainfield	07080	(908) 757-1424	Middlesex	
Clinical Care Provider Location	Urgent Care	Doctors Express Urgent Care	907 Oak Tree Avenue	South Plainfield	07080	(908) 222-3500	Middlesex	
Clinical Care Provider Location	Urgent Care	E-Medical	369 Springfield Avenue	Berkeley Heights	07922	(908) 464-6700	Union	
Clinical Care Provider Location	Urgent Care	E-Medical	2 Kings Highway	Middletown	07748	(732) 957-0707	Monmouth	
Clinical Care Provider Location	Urgent Care	Family First Urgent Care	1910 Highway 35 South	Oakhurst	07755	(732) 531-0100	Monmouth	
Clinical Care Provider Location	Urgent Care	Immediate Medical Services	240 Monmouth Road	Oakhurst	07755	(732) 531-7711	Monmouth	
Clinical Care Provider Location	Urgent Care	Integrated Medicine Alliance	3253 Route 35 North	Hazlet	07730	(732) 888-7646	Monmouth	
Clinical Care Provider Location	Urgent Care	Integrated Medicine Alliance	363 State Highway 36	Port Monmouth	07758	(732) 471-0400	Monmouth	
Clinical Care Provider Location	Urgent Care	Integrated Medicine Alliance	30 Shrewsbury Plaza	Shrewsbury	07702	(732) 542-0002	Monmouth	
Clinical Care Provider Location	Urgent Care	Marlboro Medical Center	3681 U.S. Highway 9 North	Freehold	07728	(732) 863-7100	Monmouth	
Clinical Care Provider Location	Urgent Care	MD Care Urgent Care Center	400 Westfield Avenue	Elizabeth	07208	(908) 691-3800	Union	
Clinical Care Provider Location	Urgent Care	Medical Walk-In of Freehold	3333 Route 9 North	Freehold	07728	(732) 683-1975	Monmouth	
Clinical Care Provider Location	Urgent Care	Summit Medical Group	1 Diamond Hill Road	Berkeley Heights	07922	(908) 273-4300	Union	
Clinical Care Provider Location	Urgent Care	Union County Healthcare Associates	300 South Avenue	Garwood	07027	(908) 232-2273	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Clinical Care Provider Location	Urgent Care	Urgent Care New Jersey	2090 Lincoln Highway	Edison	08817	(732) 662-5650	Middlesex	
Behavioral Health Locations	County Mental Health Boards	Middlesex County Admin. Building	75 Bayard St	New Brunswick City	08901	(732) 745-4313	Middlesex	
Behavioral Health Locations	County Mental Health Boards	Monmouth Co. Div. of Mental Health & Addiction Services	3000 Kozloski Rd P.O. Box 3000	Freehold Township	07728	(732) 431-6451	Monmouth	
Behavioral Health Locations	County Mental Health Boards	Union County Mental Health Board: DHS Division of Planning	10 Elizabethtown Plaza	Elizabeth City	07207	(908) 527-4846	Union	
Behavioral Health Locations	Designated Screening Center	Central State Medical Center	901 West Main St	Freehold Township	07728	(732) 294-2595	Monmouth	
Behavioral Health Locations	Designated Screening Center	Jersey Shore University Medical Center	1945 Corlies Ave, Route 33	Neptune Township	07753	(732) 776-4555	Monmouth	
Behavioral Health Locations	Designated Screening Center	Monmouth Medical Center	300 Second Ave	Long Branch	07740	(732) 923-6999	Monmouth	
Behavioral Health Locations	Designated Screening Center	Riverview Medical Center	1 Riverview Plaza	Red Bank	07701	(732) 219-5325	Monmouth	
Behavioral Health Locations	Designated Screening Center	University care	671 Hoes Ln	Piscataway Township	08855	(732) 235-5700	Middlesex	
Behavioral Health Locations	Early Intervention & Support Services (Crisis Intervention)	Monmouth Medical Center West Side Plaza	3301 Highway 66, Building B, Suite 201	Neptune Township	07753	(732) 922-1042	Monmouth	
Behavioral Health Locations	Early Intervention & Support Services (Crisis Intervention)	University care North	667 Hoes Ln West	Piscataway Township	08855	(732) 235-4422	Middlesex	
Behavioral Health Locations	Emergency Services Affiliated w/ Screening center	Overlook Hospital	99 Beavior at Silvan Rd	Summit City	07901	(908) 522-2232	Union	
Behavioral Health Locations	Emergency Services Affiliated w/ Screening center	Rahway Hospital	865 Stone St	Rahway City	07065	(732) 381-4949 (732) 499- 6165	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Behavioral Health Locations	Intensive Outpatient Treatment and Support Services	Trinitas Hospital	655 East Jersey St	Elizabeth City	07206	(908) 994-7278 (908) 994- 7250	Union	
Behavioral Health Locations	Intensive Outpatient Treatment and Support Services	University care	303 George St	New Brunswick City	08901	(732) 235-6800	Middlesex	
Behavioral Health Locations	Outpatient	Catholic Charities, Diocese of Metuchen	288 Rues Ln	East Brunswick Township	08816	(732) 257-6100 (800) 655- 9491	Middlesex	RBMC OB
Behavioral Health Locations	Outpatient	Community YMCA Family Services	166 Main St	Matawan Borough	07747	(732)290-9040	Monmouth	RBMC OB
Behavioral Health Locations	Outpatient	CPC Behavioral Healthcare: Aberdeen Counseling Center	1088 Highway 34	Aberdeen Township	07747	(732) 290-1700, ext. 5205	Monmouth	RBMC OB
Behavioral Health Locations	Outpatient	Diocese of Catholic Charities	288 Rues Lane	East Brunswick Township	08816	(732)257-6100	Middlesex	RBMC OB
Behavioral Health Locations	Outpatient	Comprehensive Care Services	321 State St	Perth Amboy Township	08861	(732)697-0700	Middlesex	RBMC PA
Behavioral Health Locations	Outpatient	Journey to Wellness INC	222 New Brunswick Ave	Perth Amboy City	08861	(732)709-7440	Middlesex	RBMC PA
Behavioral Health Locations	Outpatient	Raritan Bay Mental Health Center	570 Lee St	Perth Amboy City	08861	(732) 442-1666	Middlesex	RBMC PA
Behavioral Health Locations	Outpatient	Habit OPCO DBA Strathmore Clinic, INC	1 Lower Main St	South Amboy City	08879	(732)727-2555	Middlesex	RBMC PA/OB
Behavioral Health Locations	Outpatient	Advanced Health & Education LLC	3 Corbett Way	Eatontown Borough	07724	(848)456-539	Monmouth	
Behavioral Health Locations	Outpatient	Bridgeway Rehabilitation Services	567 Morris Ave	Elizabeth	07208	(908) 355-7200	Union	
Behavioral Health Locations	Outpatient	Catholic Charities - Project Free	238 Neptune Blvd	Neptune Township	07753	(732)897-7701	Monmouth	
Behavioral Health Locations	Outpatient	Center for Network Therapy LLP	333 Cedar Ave	Middlesex Borough	08846	(732)560-1080	Middlesex	
Behavioral Health Locations	Outpatient	CPC Behavioral Healthcare	270 Highway 35	Red Bank	07701	(732) 842-2000, ext. 4221	Monmouth	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Behavioral Health Locations	Outpatient	CPC Behavioral Healthcare	270 Highway 35	Red Bank Borough	07701	(732)842-2000	Monmouth	
Behavioral Health Locations	Outpatient	Crossroads	230 Newman Springs Rd	Middletown Township	07738	(732)615-2269	Monmouth	
Behavioral Health Locations	Outpatient	Freehold Self- Help Center	17 Bannard St, Suite 22	Freehold Township	07728	(732) 625-9485	Monmouth	
Behavioral Health Locations	Outpatient	Guiding Light Drug and Alcohol Treatment Services	1930 Heck Ave	Neptune Township	07755	(732)774-0911	Monmouth	
Behavioral Health Locations	Outpatient	Habit OPCO DBA Suburban Treatment Associates	43 Progress St	Union	07083	(908) 687-7188	Union	
Behavioral Health Locations	Outpatient	INTERVENTION SPECIALISTS, LLC	583 Morris Ave	Elizabeth City	07208	(908)289-0700	Union	
Behavioral Health Locations	Outpatient	Jersey Shore Medical Center	1945 Corlies Ave, Route 33	Neptune Township	07753	(732) 643-4351	Monmouth	
Behavioral Health Locations	Outpatient	Jersey Shore University Medical	Behavioral Health, Parkway 100	Neptune Township	07754	(732)530-3802	Monmouth	
Behavioral Health Locations	Outpatient	JFK/Center For Behavioral Health	65 James St	Edison Township	08818	(732) 321-7189	Middlesex	
Behavioral Health Locations	Outpatient	JSAS Healthcare Inc	685 Neptune Blvd	Neptune Township	07753	(732)988-8877	Monmouth	
Behavioral Health Locations	Outpatient	Monmouth Medical Center	75 North Bath Ave	Long Branch	07740	(732) 923-5222	Monmouth	
Behavioral Health Locations	Outpatient	New Brunswick Counseling Center	320 Suydam St	New Brunswick City	08901	(732)246-4025	Middlesex	
Behavioral Health Locations	Outpatient	New Hope Foundation Inc (Freehold)	2 Monmouth Ave	Freehold Borough	07728	(732)308-0113	Monmouth	
Behavioral Health Locations	Outpatient	New Hope Foundation Inc Phillip House (OP/IOP)	190 Chelsea Ave	Long Branch City	07740	(732) 870-8500	Monmouth	
Behavioral Health Locations	Outpatient	New Life Counseling	25 E. Front St	Keyport Borough	07735	(732)264-3824	Monmouth	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Behavioral Health Locations	Outpatient	Oasis Clinical Services INC	208 Commerce Pl	Elizabeth city	07201	(908)372-3000	Union	
Behavioral Health Locations	Outpatient	Ocean TWP Human Services	601 Deal Rd	Ocean Township (Oakhurst)	07755	(732)531-2600	Monmouth	
Behavioral Health Locations	Outpatient	Organization for Recovery, INC.	519 North Avenue	Plainfield City	07060	(908)769-4700	Union	
Behavioral Health Locations	Outpatient	Princeton House Behavioral Health	1460 Livingston Ave	North Brunswick Township	08902	(732)729-3600	Middlesex	
Behavioral Health Locations	Outpatient	PROCEED, INC	1126 DICKINSON ST.	ELIZABETH CITY	07201	(908)351-7727	Union	
Behavioral Health Locations	Outpatient	Recovery Innovations	1 Corbett Way	Eatontown Borough	07724	(732)380-7061	Monmouth	
Behavioral Health Locations	Outpatient	Riverview Medical Center	1 Riverview Plaza	Red Bank	07701	(732) 923-5222	Monmouth	
Behavioral Health Locations	Outpatient	Riverview Medical Center & Behavioral Health	48 East Front St	Red Bank Borough	07701	(732)450-2900	Monmouth	
Behavioral Health Locations	Outpatient	STEPS RECOVERY CENTER (MUHLENBERG)	PARK AVE & RANDOLPH RD	PLAINFIELD CITY	07061	(908)668-2095	UNION	
Behavioral Health Locations	Outpatient	The Center for Change and Recovery, LLC	1255 Bound Brook RD	Middlesex Borough	08846	(732)667-5567	Middlesex	
Behavioral Health Locations	Outpatient	The Center for Great Expectations	123 How Lane	New Brunswick City	08901	(732)993-6403	Middlesex	
Behavioral Health Locations	Outpatient	The Counseling Center of Freehold	4345 Route 9	Freehold Township	07728	(732)882-4369	Monmouth	
Behavioral Health Locations	Outpatient	The Open Door (New Hope Foundation)	2-4 New & Kirkpatrick St	New Brunswick City	08901	(732)246-4800	Middlesex	
Behavioral Health Locations	Outpatient	Trinitas Hospital	655 East Jersey St	Elizabeth City	07206	(908) 994-7060	Union	
Behavioral Health Locations	Outpatient	Trinitas Hospital - HIV Mental	654 E. Jersey St.	Elizabeth City	07206	(908)994-7438	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Behavioral Health Locations	Outpatient	Trinitas Hospital: Dept of Psychiatry	655 East Jersey St	Elizabeth City	07206	(908) 994-7278 (908) 994- 7478 (908) 994-71731	Union	
Behavioral Health Locations	Outpatient	UCPC Behavioral Healthcare	117-119 Roosevelt Ave	Plainfield City	07060	(908)756-6870	Union	
Behavioral Health Locations	Outpatient	UMDNJ	390 George ST	New Brunswick City	08901	(732)235-3440	Middlesex	
Behavioral Health Locations	Outpatient	University Behavioral Healthcare	100 Metroplex	Edison Township	08817	(800) 969-5300	Middlesex	
Behavioral Health Locations	Outpatient	University Behavioral Healthcare	303 George St	New Brunswick City	08901	(800) 969-5300	Middlesex	
Behavioral Health Locations	Outpatient	University Behavioral Healthcare	4326 Route 1 North	South Brunswick Twp: Monmouth Junction	08852	(732) 235-8799	Middlesex	
Behavioral Health Locations	Outpatient	Wall Youth Center and Community	1824 South Main St	Wall Township	07719	(732)681-1375	Monmouth	
Behavioral Health Locations	Outpatient & Residential	Discovery Institute for Addictive Disorders INC	80 Conover Rd	Marlboro Township	07746	(732)946-9444	Monmouth	
Behavioral Health Locations	Outpatient & Residential	OVERLOOK HOSPITAL ATLANTIC BEHAVIORAL HEALTH	46-48 BEAUVIOR AVENUE	Summit	07902	(908)522-2837	Union	
Behavioral Health Locations	Outpatient & Residential	The Lennard Clinic	850 Woodruff Lane	Elizabeth City	07201	(908)352-0850	Union	
Behavioral Health Locations	Partial Care/Partial Hospitalization	CPC care Aberdeen Center	1088 Highway 34	Aberdeen Township	07747	(732) 290-1700	Monmouth	RBMC OB
Behavioral Health Locations	Partial Care/Partial Hospitalization	Raritan Bay Mental Health Center	570 Lee St	Perth Amboy City	08861	(732) 442-1666	Middlesex	RBMC PA
Behavioral Health Locations	Partial Care/Partial Hospitalization	Bridgeway House	615 North Broad St	Elizabeth City	07280	(908) 355-7886	Union	
Behavioral Health Locations	Partial Care/Partial Hospitalization	Jersey Shore Medical Center Park Place	1011 Bond St	Asbury Park	07712	(732) 776-4361 (732) 869- 2781	Monmouth	
Behavioral Health Locations	Partial Care/Partial Hospitalization	Monmouth Medical Center - Genesis	75 North Bath Ave	Long Branch	07740	(732) 222-2215	Monmouth	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Behavioral Health Locations	Partial Care/Partial Hospitalization	Monmouth Medical Center Community Connection	75 North Bath Ave	Long Branch	07740	(732) 728-7662	Monmouth	
Behavioral Health Locations	Partial Care/Partial Hospitalization	Mt. Carmel Guild care	108 Alden St	Cranford city	07016	(908) 497-3919/3925/3968	Union	
Behavioral Health Locations	Partial Care/Partial Hospitalization	Riverview Medical Center	661 Shrewsbury Ave	Shrewsbury	07702	(732) 643-4400	Monmouth	
Behavioral Health Locations	Partial Care/Partial Hospitalization	Trinitas Hospital: Dept of Psychiatry	655 East Jersey St	Elizabeth City	07206	(908) 994-7255 (908) 994- 71731	Union	•
Behavioral Health Locations	Partial Care/Partial Hospitalization	UCPC care	117-119 Roosevelt Ave	Plainfield City	07060	(908) 756-6870 (973) 571- 4100	Union	
Behavioral Health Locations	Partial Care/Partial Hospitalization	University care	667 Hoes Ln	Piscataway Township	08855	(732) 235-5910	Middlesex	
Behavioral Health Locations	Primary Screening Center	Trinitas Hospital	655 East Jersey St	Elizabeth City	07201	(908) 994-7131	Union	
Behavioral Health Locations	Program for Assertive Community Treatment	Catholic Charities, Diocese of Metuchen	288 Rues Ln	East Brunswick Township	08816	(732) 387-1307 (PACT II)	Middlesex	RBMC OB
Behavioral Health Locations	Program for Assertive Community Treatment	Catholic Charities, Diocese of Metuchen	319 Maple St	Perth Amboy City	08861	(732) 857-3894 (PACT III)	Middlesex	RBMC PA
Behavioral Health Locations	Program for Assertive Community Treatment	Bridgeway Rehabilitation Inc	96 West Grand St	Elizabeth City	07202	(908) 352-0242	Union	
Behavioral Health Locations	Program for Assertive Community Treatment	Bridgeway Rehabilitation Inc	313 E Front St	Plainfield City	07060	(908) 791-0505	Union	
Behavioral Health Locations	Program for Assertive Community Treatment	Bridgeway Rehabilitation Inc	1023 Commerce Ave	Union	07083	(908) 688-5400	Union	
Behavioral Health Locations	Program for Assertive Community Treatment	Catholic Charities, Diocese of Metuchen	26 Safran Ave	Edison Township	08837	(732) 646-4039 (PACT I)	Middlesex	
Behavioral Health Locations	Program for Assertive Community Treatment	CPC care	270 Highway 35	Red Bank	07701	(732) 842-2000, ext. 4301	Monmouth	
Behavioral Health Locations	Residential	CPC Behavioral Healthcare Aberdeen Center	1088 Highway 34	Aberdeen Township	07747	(732) 290-1700	Monmouth	RBMC OB
Behavioral Health Locations	Residential	Declarations	345 Union Hill Rd, Building 2, Suite C	Manalapan	07726	(732) 792-6990	Monmouth	RBMC OB

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Behavioral Health Locations	Residential	Easter Seal Society of NJ Middlesex Behavioral Health Services	1 Kimberly Rd	East Brunswick Township	08816	(908) 257-6662	Middlesex	RBMC OB
Behavioral Health Locations	Residential	Collaborative Support Program (CSP) Inc	11 Spring St	Freehold Township	07728	(732) 780-1175	Monmouth	
Behavioral Health Locations	Residential	Damon House, Inc	105 Joyce Kilmer Ave	New Brunswick City	08901	(732)828-3988	Middlesex	
Behavioral Health Locations	Residential	Easter Seal Society of NJ	1800 Bloomsbury Avenue	Ocean Twp: Wannamassa	07712	(732) 918-1188, ext. 111	Monmouth	
Behavioral Health Locations	Residential	Endeavor House	6 Broadway	Keyport Borough	07735	(732)264-3824 x101	Monmouth	
Behavioral Health Locations	Residential	Epiphany House (Asbury Park)	300 4th Ave	Asbury Park City	07712	(732)775-0720	Monmouth	-
Behavioral Health Locations	Residential	Epiphany House (Long Branch)	373 Brighton Ave	Long Branch City	07740	(732)870-9113	Monmouth	
Behavioral Health Locations	Residential	Esperenza	361-363 Monroe Ave, 1st Floor	Kenilworth Borough	07033	(908) 272-5296	Union	
Behavioral Health Locations	Residential	New Hope Foundation Inc - Mattie House	86 Conover Rd	Marlboro Township	07746	(732)817-0616	Monmouth	
Behavioral Health Locations	Residential	New Hope Foundation Inc (Marlboro)	80 Conover Rd	Marlboro Township	07746	(732)946-3030 x243	Monmouth	
Behavioral Health Locations	Residential	New Hope Foundation Inc Phillip House	190 Chelsea Ave	Long Branch City	07740	(732)946-3030 x225	Monmouth	
Behavioral Health Locations	Residential	SERV Centers of NJ	130 Dermody St	Cranford Township	07016	(908) 276-0490	Union	
Behavioral Health Locations	Residential	SERV Centers of NJ	491 S. Washington Ave	Piscataway Township	08854	(732) 968-7111	Middlesex	
Behavioral Health Locations	Residential	Triple C Housing, Inc	316 Livingston Ave	New Brunswick City	08901	(732) 745-0920	Middlesex	

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Behavioral Health Locations	Residential	Triple C Housing, Inc	1 Distribution Way	South Brunswick Twp: Monmouth Junction	08852	(609) 655-3950 (732) 745- 0920	Middlesex	
Behavioral Health Locations	Residential	University Behavioral Healthcare	671 Hoes Ln	Piscataway Township	08855	(732) 235-5353	Middlesex	
Behavioral Health Locations	Residential	Volunteers of America Northern NJ	205 West Milton Ave	Rahway City	08056	(732) 827-2444	Union	
Behavioral Health Locations	RIST	Bridgeway Rehabilitation Services Inc	720 King Georges Road, Suite 111	Woodbridge Twp: Fords	08863	(732) 771-2300	Middlesex	RBMC PA
Behavioral Health Locations	RIST	Community Access Unlimited	80 West Grand St	Elizabeth City	07202	(908) 354-3040	Union	
Behavioral Health Locations	Self Help Centers	Moving Forward SHC	35 Elizabeth St, 2nd Fl, Suite 2A	New Brunswick City	08901	(732) 317-2920	Middlesex	
Behavioral Health Locations	Self Help Centers	New Beginnings SHC	516 Morris Ave, 1st Floor	Elizabeth City	07208	(908) 352-7830	Union	
Behavioral Health Locations	Self Help Centers	Park Avenue SHC	333 Park Avenue	Plainfield City	07060	(908) 757-1350	Union	
Behavioral Health Locations	Self Help Centers	The C.A.R.E Center	80 Steiner Ave	Neptune City	07753	(732) 455-5358	Monmouth	
Behavioral Health Locations	Short Term Care Facility	Raritan Bay Mental Health Center	530 New Brunswick Ave	Perth Amboy City	08861	(732) 324-5119	Middlesex	RBMC PA
Behavioral Health Locations	Short Term Care Facility	Centra State Medical Center	901 West Main St	Freehold Township	07728	(732) 294-2858	Monmouth	
Behavioral Health Locations	Short Term Care Facility	Monmouth Medical Center/ St. Barnabas	300 Second Ave	Long Branch	07740	(732) 923-6901	Monmouth	
Behavioral Health Locations	Short Term Care Facility	Runnells Union Co. Psychiatric Hospital	40 Watchung Way	Berkeley Heights	07922	(908) 771-5700	Union	
Behavioral Health Locations	Short Term Care Facility	Trinitas Hospital	655 East Jersey St	Elizabeth City	07206	(908) 994-7205 or 994-7275	Union	
Behavioral Health Locations	Voluntary Unit	Raritan Bay Mental Health Center for Living	530 New Brunswick Ave	Perth Amboy City	08861	(732) 324-5101	Middlesex	RBMC PA
Behavioral Health Locations	Voluntary Unit	Centra State Medical Center	901 West Main St	Freehold Township	07728	(732) 294-2858	Monmouth	

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Behavioral Health Locations	Voluntary Unit	Monmouth Medical Center	300 Second Ave	Long Branch	07740	(732) 923-6901	Monmouth	
Behavioral Health Locations	Voluntary Unit	Riverview Hospital	1 Riverview Plaza, Lower Level 1	Red Bank	07701	(732) 450-2705	Monmouth	<u>.</u>
Behavioral Health Locations	Voluntary Unit	Trinitas Hospital	655 East Jersey St	Elizabeth City	07206	(908) 994-7205	Union	
Behavioral Health Locations	Voluntary Unit	UMDNJ-UBHC	671 Hoes Ln	Piscataway Township	08855	(732) 895-3952	Middlesex	
Communicable Disease Services	Immunizations	Children's Immunization center	342 Westminster Avenue	Elizabeth	07207	(908) 965-2734	Union	
Communicable Disease Services	Immunizations	Middlesex County Immunization Program	597 Jersey Avenue, suite B	New Brunswick	08901	(732) 745-3125	Middlesex	
Communicable Disease Services	Immunizations	Monmouth County Health Department	3436 Route 9	Freehold	07728	(732) 431-7456	Monmouth	
Communicable Disease Services	Immunizations	Union County Immunization Center	40 Parker Road	Elizabeth	07207	(908) 965-3868	Union	
Communicable Disease Services	TB Center	City of Elizabeth Department of Health and Human Services	60 Winfield Scott Plaza	Elizabeth	07201	(908) 820-4246	Union	
Communicable Disease Services	TB Center	Middlesex County Tuberculosis	29 Oakwood Ave	Edison	08837	(732) 548-2884	Middlesex	
Communicable Disease Services	TB Center	Monmouth County Health Department	3435 Route 9	Freehold	07728	(732) 431-7456	Monmouth	
Communicable Disease Services	TB Center	Rahway Health Department	1 City Hall Plaza	Rahway	07065	(732) 827-2158	Union	
Communicable Disease Services	TB Center	Township of Cranford Department of Health	8 Springfield Avenue	Cranford	07016	(908) 709-7238	Union	
Communicable Disease Services	TB Center	Tuberculosis Clinic of Union Counties	210 Williamson St	Elizabeth	07202	(908) 352-2462	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Madison Center	625 State Highway 34	Matawan	07747	(732)566-6400	Monmouth	RBMC OB

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Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Monroe Village Health Care Center	One David Brainerd Drive	Monroe Township	08831	(732)521-6400	Middlesex	RBMC OB
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Pine Brook Care Center	104 Pension Road	Englishtown	07726	(732)446-3600	Monmouth	RBMC OB
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Victoria Health Care Center	40 Freneau Avenue	Matawan	07747	(732)765-5600	Monmouth	RBMC OB
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	St. Joseph's Home Assisted Living & Nursing Ctr Inc DBA St. Joseph's Senior Home	1-3 St Joseph's Terrace	Woodbridge	07095	(732)750-0077	Middlesex	RBMC PA
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Reformed Church Home	1990 Route 18 North	Old Bridge	08857	(732)607-9230	Middlesex	RBMC PA/OB
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Roosevelt Care Center At Old Bridge	1133 Marlboro Road	Old Bridge	08857	(732)360-9830	Middlesex	RBMC PA/OB
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Summer Hill Nursing Home	111 Route 516	Old Bridge	08857	(732)254-8200	Middlesex	RBMC PA/OB
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Alaris Health at Riverton	1777 Lawrence Street	Rahway	07065	(732)499-7927	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Applewood Estates	Applewood Drive	Freehold	07728	(732)780-7370	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	AristaCare at Norwood Terrace	40 Norwood Avenue	Plainfield	07060	(908)769-1400	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Arnold Walter Nursing Home	622 S Laurel Avenue	Hazlet	07730	(732)787-6300	Monmouth	

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Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Ashbrook Care & Rehabilitation Center	1610 Raritan Road	Scotch Plains	07076	(908)889-5500	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Bayshore Health Care Center	715 North Beers Street	Holmdel	07733	(732)739-9000	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Berkeley Heights Nursing and Rehabilitation Center	35 Cottage Street	Berkeley Heights	07922	(908)464-0048	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Berkeley Meadows	311 Springfield Avenue	Berkeley Heights	07922	(908)464-9260	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Care One at Holmdel	188 Highway 34	Holmdel	07733	(732)946-4200	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Care One at King James	1040 Highway 36	Atlantic Highlands	07716	(732)291-3400	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Care One At Wall	2621 Highway 138	Wall	07719	(732)556-1060	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Chapin Hill at Red Bank	100 Chapin Avenue	Red Bank	07701	(732)741-8811	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Children's Specialized Hospital	150 New Providence Road	Mountainside	07092	(908)233-3720	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Clark Nursing And Rehabilitation Center	1213 Westfield Avenue	Clark	07066	(732)396-7100	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Continuing Care at Seabrook	3002 Essex Road	Tinton Falls	07753	(732)643-2000	Monmouth	

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Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Cornell Hall Care & Rehabilitation Center	234 Chestnut Street	Union	07083	(908)687-7800	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Cranford Park Rehabilitation & Healthcare Center	600 Lincoln Park East	Cranford	07016	(908)276-7100	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Cranford Rehab & Nursing Center	205 Birchwood Ave	Cranford	07016	(908)272-6660	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Delaire Nursing & Convalescent Center	400 W Stimpson Ave	Linden	07036	(908)862-3399	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Elizabeth Nursing And Rehab Center	1048 Grove Street	Elizabeth	07202	(908)354-0002	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Elmora Hills Health & Rehabilitation Center	225 W Jersey Street	Elizabeth	07202	(908)353-1220	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	FK Hartwyck At Cedar Brook	1340 Park Ave	Plainfield	07060	(908)754-3100	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Jersey Shore Center	3 Industrial Way East	Eatontown	07724	(732)544-1557	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	JFK Hartwyck At Edison Estates	10 Brunswick Avenue	Edison	08817	(732)985-1500	Middlesex	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	King Manor Care and Rehabilitation Center	2303 West Bangs Ave	Neptune	07753	(732)774-3500	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Laurel Bay Health & Rehabilitation Center	32 Laurel Avenue	Keansburg	07734	(732)787-8100	Monmouth	

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Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Liberty Royal Rehabilitation and Health Care Center	524 Wardell Road	Tinton Falls	07753	(732)922-9330	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Manor Care Health Services Mountainside	1180 Route 22 West	Mountainside	07092	(908)654-0020	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	ManorCare Health Services- New Providence	144 Gales Drive	New Providence	07974	(908)464-8600	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Medicenter Rehabilitation and Nursing	2050 Sixth Ave	Neptune City	07753	(732)774-8300	Monmouth	-
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Meridian Nursing & Rehabilitation at Shrewsbury	89 Avenue At The Common	Shrewsbury	07702	(732)676-5800	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Meridian Nursing and Rehabilitation at Ocean Grove	160 Main Street	Ocean Grove	07756	(732)481-8300	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Meridian Subacute Rehabilitation	1725 Meridian Trail	Wall	07719	(732)312-1800	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Merwick Care & Rehabilitation Center	100 Plainsboro Road	Plainsboro	08536	(609)759-6000	Middlesex	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Monmouth Care Center	229 Bath Avenue	Long Branch	07740	(732)229-4300	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Monmouth Co Care Centers John L Montgomery Division	115 Dutchlane Road	Freehold	07728	(732)431-7420	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Monmouth County Care Centers Geraldine L Thompson Division	2350 Hospital Road	Allenwood	08720	(732)683-8600	Monmouth	

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Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Neptune Rehabilitation And Care Center	101 Walnut St	Neptune	07753	(732)774-3550	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	New Jersey Veterans Memorial Home Menlo Park	132 Evergreen Rd	Edison	08818	(732)452-4100	Middlesex	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Park Place Center	2 Deer Park Drive	Monmouth Junction	08852	(732)274-1122	Middlesex	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Plaza Healthcare & Rehabilitation Center	456 Rahway Avenue	Elizabeth	07202	(908)354-1300	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Regency Park Nursing Center	3325 Highway 35	Hazlet	07730	(732)264-5800	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Robert Wood Johnson University Hospital at Rahway	865 Stone Street	Rahway	07065	(732)381-4200	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Roosevelt Care Center - Buildings I & II	118 Parsonage Road	Edison	08837	(732)321-6800	Middlesex	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Rose Mountain Care Center	Route 1 & 18	New Brunswick	08901	(732)828-2400	Middlesex	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Runnells Specialized Hospital	40 Watchung Way	Berkeley Heights	07922	(908)771-5807	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	South Mountain Healthcare & Rehabilitation	2385 Springfield Avenue	Vauxhall	07088	(908)688-3400	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Sunnyside Manor	2501 Ramshorn Drive	Manasquan	08736	(732)528-9311	Monmouth	-

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Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	The Atrium at Navesink Harbor	40 Riverside Avenue	Red Bank	07701	(732)842-3400	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	The Manor	689 West Main St	Freehold	07728	(732)431-5200	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	The Woodlands	1400 Woodland Ave	Plainfield	07060	(908)753-1113	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Tower Lodge Care Center	1506 Gully Road	Wall	07719	(732)681-1400	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Trinitas Hospital	655 East Jersey Street	Elizabeth	07206	(908)994-7050	Union	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Wedgwood Gardens Care Center	3419 Highway 9	Freehold	07728	(732)677-1200	Monmouth	
Inpatient Rehabilitation & Long Term Care	Long-Term Residential Health Care	Westfield Center	1515 Lamberts Mill Road	Westfield	07090	(908)233-9700	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Spotswood Center	12 Snowhill Rd, Snowhill Plaza, Ste. 3	Spotswood	08884	(732) 723-9192	Middlesex	RBMC OB
Maternal & Pediatric	Family Planning/Women's Health Center	Jewish Renaissance Medical Center	272A Hobart St	Perth Amboy	08861	732-376-9333	Middlesex	RBMC PA
Maternal & Pediatric	Family Planning/Women's Health Center	Perth Amboy Center	450 Market St	Perth Amboy	08861	(732) 442-4499	Middlesex	RBMC PA
Maternal & Pediatric	Family Planning/Women's Health Center	Perth Amboy High School	300 Eagle Ave	Perth Amboy	08861	732-376-6030	Middlesex	RBMC PA

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Maternal & Pediatric	Family Planning/Women's Health Center	Clinton Elementary School	Clinton Ave & W. 4th St	Plainfield	07060	908-731-4288	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Elizabeth Health Center	1150 Dickinson St	Elizabeth	07201	(908) 351-5384	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Eric B. Chandler Health Center	277 George St	New Brunswick	08901	732-235-6700	Middlesex	
Maternal & Pediatric	Family Planning/Women's Health Center	Eric B. Chandler Health Center Church at New Brunswick High School	1000 Somerset St	New Brunswick	08901	732-235-7435	Middlesex	
Maternal & Pediatric	Family Planning/Women's Health Center	Eric B. Chandler Health Center Church St Annex	123 Church St	New Brunswick	08901	732-235-2052	Middlesex	
Maternal & Pediatric	Family Planning/Women's Health Center	Freehold Center	800 W Main St	Freehold	07728	(732) 431-1717	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Hazlet Center	Bethany Commons Bldg 6, Suite 91	Hazlet	07730	(732) 888-4900	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Jefferson Elementary School	1200 Myrtle Ave	Plainfield	07063	908-731-4288	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Monmouth Family Health Center	270 Broadway	Long Branch	07740	732-413-2030	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Monmouth Family Health Center	300 Second Ave	Long Branch	07740	732-413-2030	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Neighborhood Health Center	1700-58 Myrtle Ave	Plainfield	07063	908-753-6401	Union	

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Maternal & Pediatric	Family Planning/Women's Health Center	Neighborhood Health Center Cardinal	950 Park Ave	Plainfield	07060	908-754-5840	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Neighborhood Health Center Elizabeth	250-254 Second St	Elizabeth	07206	908-355-4459	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Neighborhood Health Center The Healthy Place	427 Darrow Ave	Plainfield	07060	908-731-4288	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Neighborhood Health Services Corp Elizabeth	184 First St	Elizabeth	07206	(908) 355-4459	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	New Brunswick Center	108 Industrial Dr	New Brunswick	08901	(732) 246-2411	Middlesex	
Maternal & Pediatric	Family Planning/Women's Health Center	Plainfield Health Center	123 Park Ave	Plainfield	07060	(908) 756-3736	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Shrewsbury Center	69 East Newman Springs Road, PO Box 95	Shrewsbury	07702	(732) 842-9300	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Stillman Elementary School	201 W. 4th St	Plainfield	07060	908-731-4288	Union	
Maternal & Pediatric	Family Planning/Women's Health Center	Visiting Nurse Association of Central Jersey - Keansburg Community Health Center	100 Main St	Keansburg	07734	(732) 787-1250	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad St	Keyport	07735	(732) 888-4149	Monmouth	

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Maternal & Pediatric	Family Planning/Women's Health Center	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	176 Riverside Ave	Red Bank	07701	(732) 219-6620	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Visiting Nurse Association of Central Jersey Community Health Center	1301 Main St	Asbury Park	07712	732-774-6333	Monmouth	
Maternal & Pediatric	Family Planning/Women's Health Center	Women's Wellness Center of the Monmouth Family Health Center	80 Pavilion Ave	Long Branch	07740	732-413-2030	Monmouth	
Maternal & Pediatric	Pediatric Clinic	Monmouth Family Health Center	270 Broadway	Long Branch	07740	732-413-2030	Monmouth	
Maternal & Pediatric	Pediatric Clinic	Monmouth Family Health Center	300 Second Ave	Long Branch	07740	732-413-2030	Monmouth	-
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Clinton Elementary School	Clinton Ave & W. 4th St	Plainfield	07060	908-731-4288	Union	
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Jefferson Elementary School	1200 Myrtle Ave	Plainfield	07063	908-731-4288	Union	
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Neighborhood Health Center	1700-58 Myrtle Ave	Plainfield	07063	908-753-6401	Union	-
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Neighborhood Health Center Cardinal	950 Park Ave	Plainfield	07060	908-754-5840	Union	
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Neighborhood Health Center Elizabeth	250-254 Second St	Elizabeth	07206	908-355-4459	Union	

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Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Neighborhood Health Center The Healthy Place	427 Darrow Ave	Plainfield	07060	908-731-4288	Union	
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Neighborhood Health Services Corp Elizabeth	184 First St	Elizabeth	07206	(908) 355-4459	Union	
Maternal & Pediatric	Pediatrics/ Family Planning/Women's Health	Stillman Elementary School	201 W. 4th St	Plainfield	07060	908-731-4288	Union	
Maternal & Pediatric	Pediatrics/ Prenatal/ Women's Health Clinic	Visiting Nurse Association of Central Jersey - Keansburg Community Health Center	100 Main St	Keansburg	07734	(732) 787-1250	Monmouth	
Maternal & Pediatric	Pediatrics/ Prenatal/ Women's Health Clinic	Visiting Nurse Association of Central Jersey - Keyport Primary Care Center	35 Broad St	Keyport	07735	(732) 888-4149	Monmouth	
Maternal & Pediatric	Pediatrics/ Prenatal/ Women's Health Clinic	Visiting Nurse Association of Central Jersey - Red Bank Community Health Center	176 Riverside Ave	Red Bank	07701	(732) 219-6620	Monmouth	
Maternal & Pediatric	Pediatrics/ Prenatal/ Women's Health Clinic	Visiting Nurse Association of Central Jersey Community Health Center	1301 Main St	Asbury Park	07712	732-774-6333	Monmouth	
Maternal & Pediatric	Pediatrics/Prenatal/ Family Planning/ Women's Health	Jewish Renaissance Medical Center	272A Hobart St	Perth Amboy	08861	732-376-9333	Middlesex	RBMC PA

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Maternal & Pediatric	Pediatrics/Prenatal/ Family Planning/ Women's Health	Perth Amboy High School	300 Eagle Ave	Perth Amboy	08861	732-376-6030	Middlesex	RBMC PA
Maternal & Pediatric	Pediatrics/Prenatal/ Family Planning/ Women's Health	Eric B. Chandler Health Center	277 George St	New Brunswick	08901	732-235-6700	Middlesex	
Maternal & Pediatric	Pediatrics/Prenatal/ Family Planning/ Women's Health	Eric B. Chandler Health Center Church at New Brunswick High School	1000 Somerset St	New Brunswick	08901	732-235-7435	Middlesex	
Maternal & Pediatric	Pediatrics/Prenatal/ Family Planning/ Women's Health	Eric B. Chandler Health Center Church St Annex	123 Church St	New Brunswick	08901	732-235-2052	Middlesex	
Maternal & Pediatric	Women's Health/ Prenatal Clinic	Women's Wellness Center of the Monmouth Family Health Center	80 Pavilion Ave	Long Branch	07740	732-413-2030	Monmouth	
Senior Services	Adult Day Care	All In A Day Medical Daycare Center	104 Pension Road	Englishtown	07726	(732)792-2273	Monmouth	RBMC OB
Senior Services	Adult Day Care	Golden Years Care	108 Woodward Road	Manalapan	07726	(732)851-6640	Monmouth	RBMC OB
Senior Services	Adult Day Care	Just Home Medical Adult Day	7 Edgeboro Road	East Brunswick	08816	(732)432-9990	Middlesex	RBMC OB
Senior Services	Adult Day Care	Saint Peter's Adult Day Center	200 Overlook Drive, Pondview Plaza	Monroe Township	08831	(609)655-6853	Middlesex	RBMC OB
Senior Services	Adult Day Care	2nd Home Perth Amboy, LLC	420 Fayette Street	Perth Amboy	08861	(732)826-8012	Middlesex	RBMC PA
Senior Services	Adult Day Care	Graceland Adult Medical Day Care	316 Madison Avenue	Perth Amboy	08861	(732)826-0680	Middlesex	RBMC PA
Senior Services	Adult Day Care	Always at Home	8 Jocama Blvd	Old Bridge	08857	(732)591-9155	Middlesex	RBMC PA/OB
Senior Services	Adult Day Care	Just Like Home	426 Raritan Street, Raritan Center	Sayreville	08872	(732)721-9200	Middlesex	RBMC PA/OB
Senior Services	Adult Day Care	South Amboy Adult Day Health Care Center	540 Bordentown Avenue	South Amboy	08879	(732)553-1600	Middlesex	RBMC PA/OB

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Senior Services	Adult Day Care	2nd Home Elizabeth, LLC	420-432 North Broad Street	Elizabeth	07208	(908)436-0018	Union	
Senior Services	Adult Day Care	2nd Home Sweet Home Operations, LLC	550 North Broad Street	Elizabeth	07208	(908)994-0050	Union	
Senior Services	Adult Day Care	Adult Day Program at Muhlenberg Regional Medical Center	Park Ave & Randolph Rd	Plainfield	07060	908-668-2328	Union	
Senior Services	Adult Day Care	Allaire Care	1979 Route 34 South	Wall	07719	(732)974-7666	Monmouth	
Senior Services	Adult Day Care	AristaCare at Norwood Terrace	40-44 Norwood Avenue	Plainfield	07060	(908)769-1400	Union	
Senior Services	Adult Day Care	Buckingham Place	700 Woods Lane, Suite A	Monmouth Junction	08852	(732)329-8954	Middlesex	
Senior Services	Adult Day Care	Cedar Harbor Medical Day Care Center	545 East 1st Avenue	Roselle	07203	(908)298-8588	Union	
Senior Services	Adult Day Care	Cerebral Palsy League-Adult Medical Day	61 Myrtle Street	Cranford	07016	(908)709-1800	Union	
Senior Services	Adult Day Care	Circle Of Friends, LLC	40 Stern Avenue	Springfield	07081	(973)376-4004	Union	
Senior Services	Adult Day Care	Circle of Life Adult Day Centers	3000 Hadley Road	South Plainfield	07080	(732)839-3333	Middlesex	
Senior Services	Adult Day Care	Daybreak Adult Daycare At Elizabeth	712 Newark Avenue	Elizabeth	07208	(908)353-3530	Union	-
Senior Services	Adult Day Care	Daybreak Adult Daycare at Elizabeth	712 Newark Ave	Elizabeth	07208	908-353-3530	Union	
Senior Services	Adult Day Care	Edison Adult Day Care Center, LLC	1655-150 Oak Tree Road	Edison	08820	(732)494-1001	Middlesex	
Senior Services	Adult Day Care	Five Star Adult Medical Day Care Center	1201 Deerfield Terrace	Linden	07036	(908)486-5750	Union	
Senior Services	Adult Day Care	Golden Age Care	209 Commercial Court	Morganville	07751	(732)583-9999	Monmouth	
Senior Services	Adult Day Care	Golden Era Medical Adult Day Care	36 Meridian Road	Edison	08820	(732)549-2273	Middlesex	-
Senior Services	Adult Day Care	Golden Path Adult Day Health Care, Inc	50-52 Charles Street	New Brunswick	08901	(732)640-1122	Middlesex	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Senior Services	Adult Day Care	Harmony Adult Medical Day Care Center	220 Centennial Avenue	Piscataway	08854	(732)667-5527	Middlesex	
Senior Services	Adult Day Care	Jersey Shore Adult Day Health Care Center	600 Main Street	Asbury Park	07712	(732)775-4451	Monmouth	
Senior Services	Adult Day Care	JFK Adult Medical Day Program	3 Progress Street, Suite 103	Edison	08820	(908)912-1910	Middlesex	
Senior Services	Adult Day Care	Kensington Court	864 Shrewsbury Avenue	Tinton Falls	07724	(732)784-2400	Monmouth	
Senior Services	Adult Day Care	Nirvana Adult Day Care	2050 Oak Tree Road	Edison	08820	(848)200-7343	Middlesex	
Senior Services	Adult Day Care	Parker At The Pavilion Adult Day Health Services Center, Inc	443 River Road	Highland Park	08904	(732)565-2440	Middlesex	
Senior Services	Adult Day Care	Royal Senior Care	1041 (500) Highway 36	Atlantic Highlands	07716	(732)291-0710	Monmouth	
Senior Services	Adult Day Care	SAGE Spend A Day	290 Broad Street	Summit	07901	(908)273-5550	Union	
Senior Services	Adult Day Care	Second Inning Adult Day Care Center	1501 Livingston Avenue	North Brunswick	08902	(732)626-5544	Middlesex	
Senior Services	Adult Day Care	Senior Spirit Of Roselle Park	430 Westfield Ave E	Roselle Park	07204	(908)241-9393	Union	
Senior Services	Adult Day Care	Sterling Adult Day Care Center LLC	225 North Center Drive	North Brunswick	08902	(732)951-2020	Middlesex	
Senior Services	Adult Day Care	Sunny Days Adult Day Care Center	217-225 Durham Avenue	South Plainfield	07080	(732)791-4888	Middlesex	
Senior Services	Adult Day Care	The ARC of Union County, Inc.	215 East 1st Ave	Roselle	07203	(908)259-4992	Union	
Senior Services	Adult Day Care	Town Square Adult Medical Day Care Center	1155 East Jersey Street	Elizabeth	07201	(908)787-0980	Union	
Senior Services	Adult Day Care	We Care Adult Care, Inc	552a Highway 35 South	Middletown	07748	(732)741-7363	Monmouth	
Senior Services	Adult Day Care	Wise Adult Day Services	973A Stuyvesant Ave	Union	07083	908-687-2995	Union	

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Senior Services	Adult Day Care	Young at Heart of Eatontown	139 Grant Avenue	Eatontown	07724	(732)578-1888	Monmouth	
Senior Services	Senior Services- Social	Manalapan Senior Center	211 Freehold Road	Manalapan	07726	732-446-8401	Monmouth	RBMC OB
Senior Services	Senior Services- Social	Monroe Office of Senior Services/Senior Center	12 Halsy Reed Road	Monroe Twp.	08831	609-488-7140	Middlesex	RBMC OB
Senior Services	Senior Services- Social	Spotswood Office on Aging	1 Arlington Avenue, Suite 401	Spotswood	08884	732-251-3432	Middlesex	RBMC OB
Senior Services	Senior Services- Social	Perth Amboy Alexander J. Jankowski Community Center	1 Olive Street	Perth Amboy	08861	732-826-1690	Middlesex	RBMC PA
Senior Services	Senior Services- Social	Old Bridge Senior Center/Office on Aging	1 Old Bridge Plaza	Old Bridge	08857	732-721-5600	Middlesex	RBMC PA/OB
Senior Services	Senior Services- Social	Sayreville Senior Center Office on Aging	423 Main Street	Sayreville	08872	732-390-7058	Middlesex	RBMC PA/OB
Senior Services	Senior Services- Social	South Amboy Senior Resource Center/Office on Aging	200 John T. O'Leary Blvd. 2nd Fl.	South Amboy	08879	732-316-8212	Middlesex	RBMC PA/OB
Senior Services	Senior Services- Social	South River Senior Center Office on Aging	Boro Hall, 48 Washington Street	South River	08882	732-257-1999	Middlesex	RBMC PA/OB
Senior Services	Senior Services- Social	Asbury Park Senior Center	802 Ocean Avenue	Asbury Park	07712	732-988-5252	Monmouth	
Senior Services	Senior Services- Social	Bayshore Senior Day Center	100 Main Street	Keansburg	07734	732-495-2454	Monmouth	
Senior Services	Senior Services- Social	Carteret Senior Living	1155 E Jersey St	Elizabeth	07201	(908) 787-0900	Union	
Senior Services	Senior Services- Social	Casano Community Center	314 Chestnut St	Roselle Park	07204	(908) 245-0666	Union	
Senior Services	Senior Services- Social	Clark Senior Center	430 Westfield Ave	Clark	07066	732-381-3823	Union	
Senior Services	Senior Services- Social	Cranbury Senior Community Center	23A North Main Street	Cranbury	08512	609-395-0900	Middlesex	
Senior Services	Senior Services- Social	Cranford Community Center	220 Walnut Ave	Cranford	07016	908-709-7283	Union	

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Senior Services	Senior Services- Social	East Brunswick Senior Center Department on Aging	3 Jean Walling Civic Center Dr.	East Brunswick	08815	732-390-6896	Middlesex	
Senior Services	Senior Services- Social	Eatontown Community Center	68 Broad Street	Eatontown	07724	732-389-7647	Monmouth	
Senior Services	Senior Services- Social	Edison Senior Center	2963 Woodbridge Avenue	Edison	08817	732-248-7345	Middlesex	
Senior Services	Senior Services- Social	Elizabeth House	78 E Jersey St	Elizabeth	07206	(908) 355-3406	Union	
Senior Services	Senior Services- Social	Evergreen Senior Center	400 Inman Avenue	Colonia	07067	732-726-6260	Middlesex	
Senior Services	Senior Services- Social	Gregorio Center	330 Helen St	Linden	07036	908-474-8627	Union	
Senior Services	Senior Services- Social	Highland Park Senior Recreational Center	220 South 6th Avenue	Highland Park	08904	732-819-0052	Middlesex	
Senior Services	Senior Services- Social	Highlands Community Center	22 Snug Harbor Avenue	Highlands	07732	732-872-1959	Monmouth	
Senior Services	Senior Services- Social	Hillside Senior Center	265 Hollywood Ave	Hillside	07205	908-355-8928	Union	
Senior Services	Senior Services- Social	Howell Senior Center	Preventourium Road	Howell	07731	732-938-4500	Monmouth	
Senior Services	Senior Services- Social	James F Buckle Center	25 Roosevelt Dr	Winfield	07036	908-925-2014	Union	
Senior Services	Senior Services- Social	Kenilworth Senior Center	526 Boulevard	Kenilworth	07033	908-272-7743	Union	
Senior Services	Senior Services- Social	Keyport Senior Center	110 Second Street	Keyport	07735	732-264-4916	Monmouth	
Senior Services	Senior Services- Social	Liberty Square Senior Center	240 Elizabeth Ave	Elizabeth	07206	(908) 820-4700	Union	
Senior Services	Senior Services- Social	Long Branch Senior Center	85 Second Avenue	Long Branch	07740	732-571-6542	Monmouth	
Senior Services	Senior Services- Social	Middlesex Recreation Center	Legion Place	Middlesex	08854	732-356-0414	Middlesex	
Senior Services	Senior Services- Social	Middletown Senior Center	Crydon Hall	900 Leonardville Road	07737	732-615-2265	Monmouth	
Senior Services	Senior Services- Social	Milltown Senior Center/Office On Aging	60 Violet Terrace	Milltown	08850	732-296-0681	Middlesex	
Senior Services	Senior Services- Social	Mountainside Senior Program	Borough Hall, Rt 22	Mountainside	07092	908-232-4406	Union	

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Senior Services	Senior Services- Social	Neptune Township Senior Center	1825 Corlies Avenue	Neptune	07752	732-988-8855	Monmouth	
Senior Services	Senior Services- Social	New Brunswick Senior Resource Center	81 Huntington Street	New Brunswick	08901	732-745-5100	Middlesex	
Senior Services	Senior Services- Social	North Brunswick Senior Center	15 Linwood Placce	North Brunswick	08902	732-247-0922	Middlesex	
Senior Services	Senior Services- Social	O'Donnell Dempsey Senior Citizen Center	618 Salem Ave	Elizabeth	07208	(908) 354-7431	Union	
Senior Services	Senior Services- Social	Park Hotel Rest Home	123 W 7th St	Plainfield	07060	908-754-2211	Union	
Senior Services	Senior Services- Social	Peterstown Community Center	408 Palmer St at 4th Ave	Elizabeth	07202	908-353-9806	Union	
Senior Services	Senior Services- Social	Piscataway Senior Center Office on Aging	700 Buena Vista Avenue	Piscataway	08854	732-562-1133	Middlesex	
Senior Services	Senior Services- Social	Plainfield Tower West	501 West 7th Ave	Plainfield	07060	(908) 668-1963	Union	
Senior Services	Senior Services- Social	Plainsboro Department of Recreation & Community Services	641 Plainsboro Road	Plainsboro	08536	609-799-0909	Middlesex	
Senior Services	Senior Services- Social	Rahway Senior Citizen Center	1306 Esterbrook Ave	Rahway	07065	732-827-2016	Union	
Senior Services	Senior Services- Social	Red Bank Senior Center	80 Shrewsbury Avenue	Red Bank	07701	732-747-5204	Monmouth	
Senior Services	Senior Services- Social	Retired Senior Volunteer Program	287 Handy Street	New Brunswick	08903	732-249-6330	Middlesex	
Senior Services	Senior Services- Social	Roselle Community Center	1268 Shaffer Ave Roselle	Roselle	07203	908-245-6717	Union	
Senior Services	Senior Services- Social	Sarah Bailey Civic Center	30 Church Mall Springfield	Springfield	07081	973-912-2227	Union	
Senior Services	Senior Services- Social	South Brunswick Office on Aging/Senior Center	540 Ridge Road	Monmouth Junction	08852	732-329-4000	Middlesex	
Senior Services	Senior Services- Social	South Plainfield on Aging/Senior Center	90 Maple Avenue	South Plainfield	07080	908-754-1047	Middlesex	

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Senior Services	Senior Services- Social	Springfield Seniors	350 Independence Way	Springfield	07081	973-467-1480	Union	
Senior Services	Senior Services- Social	Stephen Sampson Senior Center	800 Anna St	Elizabeth	07201	908-820-4704	Union	
Senior Services	Senior Services- Social	Tri-County Senior Citizens	450 New Market Road	Piscataway	08854	732-752-1142	Middlesex	
Senior Services	Senior Services- Social	Union Township Senior Center	968 Bonnel Ct	Union	07083	908-851-5290	Union	-
Senior Services	Senior Services- Social	Westfield Senior Community Center	558 West Broad St	Westfield	07090	908-232-4759	Union	
Senior Services	Senior Services- Social	Wilf Jewish Community Campus	1391 Martine Avenue	Scotch Plains	07076	908-889-8800	Union	
Senior Services	Senior Services- Social	YM-YWHA	501 Green Lane	Union	07083	908-289-8112	Union	
Senior Services	Senior Services-Health	Victoria Health Care Center	38 Freneau Ave	Matawan	07747	(732) 765-5600	Monmouth	RBMC OB
Senior Services	Senior Services-Health	AristaCare at Alameda Center	303 Elm Street	Perth Amboy	08861	(732)442-9540	Middlesex	RBMC PA
Senior Services	Senior Services-Health	AristaCare at Cedar Oaks	1311 Durham Ave	South Plainfield	07080	(732)287-9555	Middlesex	
Senior Services	Senior Services-Health	AristaCare at Norwood Terrace	40 Norwood Avenue	Plainfield	07060	(908)769-1400	Union	
Senior Services	Senior Services-Health	Ashbrook Care & Rehabilitation Center	1610 Raritan Road	Scotch Plains	07076	(908)889-5500	Union	
Senior Services	Senior Services-Health	Balance and Falls Prevention Program at Union Hospital	1000 Galloping Hill Rd	Union	07083	908-851-7294	Union	
Senior Services	Senior Services-Health	Brother Bonaventure Extended Care Center	655 East Jersey	Elizabeth	07206	908-994-7050	Union	_
Senior Services	Senior Services-Health	Cardiac Pulmonary Rehabilitation at Muhlenberg Regional Medical	Park Ave & Randolph Rd	Plainfield	07060	908-668-2317	Union	

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Senior Services	Senior Services-Health	Cardiac Rehabilitation Program at Overlook Hospital	99 Beauvoir Ave	Summit	07901	800-247-9580	Union	
Senior Services	Senior Services-Health	Care Alternatives, Inc.	70 Jackson Drive	Cranford	07016	(908) 931-9080	Union	
Senior Services	Senior Services-Health	Caring Hospice Services Of Central Jersey, L.L.C.	1090 King Georges Post Road #703	Edison	08837	(732) 661-9373	Middlesex	
Senior Services	Senior Services-Health	Center For Hope Hospice And Palliative Care	1900 Raritan Road	Scotch Plains	07076	(908) 889-7780	Union	
Senior Services	Senior Services-Health	Children's Specialized Hospital	200 Somerset Street	New Brunswick	08901	(732) 258-7134	Middlesex	
Senior Services	Senior Services-Health	Clark Nursing And Rehabilitation Center	1213 Westfield Avenue	Clark	07066	(908)862-3399	Union	
Senior Services	Senior Services-Health	Community Rehabilitation Center	1692 Oak Tree Road	Edison	08820	(732) 635-9729	Middlesex	
Senior Services	Senior Services-Health	Delaire Nursing & Convalescent Center	400 W Stimpson Ave	Linden	07036	(908)654-0020	Union	
Senior Services	Senior Services-Health	Donated Dental Services	1 Dental Plaza	North Brunswick	08902	732-821-2977	Middlesex	
Senior Services	Senior Services-Health	Embracing Hospice Care of New Jersey West LLC	109 South Main Street	Cranbury	08512	(609) 662-9800	Middlesex	
Senior Services	Senior Services-Health	Francis E Parker Memorial Home New Brunswick	501 Easton Ave	New Brunswick	08901	(732) 545-3110	Middlesex	
Senior Services	Senior Services-Health	Francis E Parker Memorial Home Piscataway	1421 River Road	Piscataway	08854	(732)545-8330	Middlesex	
Senior Services	Senior Services-Health	Gentiva Hospice	242 Old New Brunswick Road	Piscataway	08854	(732) 562-8800	Middlesex	-

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Senior Services	Senior Services-Health	Grace Healthcare Services L.L.C.	105 Fieldcrest Avenue	Edison	08837	(732) 225-4100	Middlesex	
Senior Services	Senior Services-Health	Hartwyck At Oak Tree	2048 Oak Tree Road	Edison	08820	(732)906-2100	Middlesex	
Senior Services	Senior Services-Health	Haven Hospice at JFK Medical Center	65 James Street	Edison	08818	(732) 321-7769	Middlesex	
Senior Services	Senior Services-Health	HCR ManorCare/Mountainside	1180 Rt 22 West	Mountainside	07092	908-654-0020	Union	
Senior Services	Senior Services-Health	Holy Redeemer Hospice	354 Union Avenue	Elizabeth	07208	(908) 352-5694	Union	
Senior Services	Senior Services-Health	Homeside Hospice LLC	67 Walnut Avenue	Clark	07066	(732) 381-3444	Union	
Senior Services	Senior Services-Health	Hospice Service at Union Hospital	1020 Galloping Hill Rd # 5	Union	07083	(908) 964-1735	Union	
Senior Services	Senior Services-Health	Life Choice Hospice of New Jersey L.L.C.	1955 State Highway 34	Wall	07719	(800) 557-7570	Monmouth	
Senior Services	Senior Services-Health	Manor Care Health Services Mountainside	1180 Route 22 West	Mountainside	07092	(908)233-9700	Union	
Senior Services	Senior Services-Health	Park Place Center	2 Deer Park Drive	Monmouth Junction	08852	(732)274-1122	Middlesex	
Senior Services	Senior Services-Health	Qualcare Therapy Center Inc & Sleep Diagnostics of NJ	2333 Morris Avenue, Suite C 3	Union	07083	(908) 688-3366	Union	
Senior Services	Senior Services-Health	Rahway Geriatrics & Rehab Center	1777 Lawrence St	Rahway	07065	732-499-7927	Union	
Senior Services	Senior Services-Health	Rahway Hospital Hospice	Rahway, NJ 07065	Rahway	07065	(973) 740-0607	Union	
Senior Services	Senior Services-Health	Rehabilitation Services at Muhlenberg Regional Medical Center	Park Ave & Randolph Rd	Plainfield	07060	908-668-2000	Union	

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Senior Services	Senior Services-Health	Robert Wood Johnson, Jr. Rehabilitation Institute	65 James Street	Edison	08818	(732) 321-7051	Middlesex	
Senior Services	Senior Services-Health	Robert Wood Visiting Nurse, Inc.	972 Shoppes Boulevard	North Brunswick	08902	(732) 224-6991	Middlesex	
Senior Services	Senior Services-Health	Runnells Specialized Hospital	40 Watchung Way	Berkeley Heights	07922	(908) 771-5700	Union	
Senior Services	Senior Services-Health	Total Hearing Care	376 North Ave	Dunellen	08812	732-424-0445	Middlesex	
Senior Services	Senior Services-Health	Trinitas Hospital Department of Physical Medicine and Rehabilitation	225 Williamson St	Elizabeth	07202	908-944-5650	Union	
Senior Services	Senior Services-Health	Westfield Center	1515 Lamberts Mill Road	Westfield	07090	(908)233-9700	Union	
Senior Services	Senior Services-Social	The Woodlands	1400 Woodland Ave	Plainfield	07060	908-753-1113	Union	
Family & Social Support Services	Domestic Violence & Child Abuse Services	180 Turning Lives Around, Inc.	1 Bethany Road	Hazlet	07730	(888) 843-9262	Monmouth	
Family & Social Support Services	Domestic Violence & Child Abuse Services	Central Jersey Legal Services	317 George Street	New Brunswick	08901	(732) 249-7600	Middlesex	
Family & Social Support Services	Domestic Violence & Child Abuse Services	Legal Services of NJ	PO Box 1357	Edison	08818	(888) 576-5529	Middlesex	
Family & Social Support Services	Domestic Violence & Child Abuse Services	Peace: A Learned Solution - Middlesex PALS	250 Livingston Avenue	New Brunswick	08901	(732) 249-4900	Middlesex	
Family & Social Support Services	Domestic Violence & Child Abuse Services	Peace: A Learned Solution - YMCA of Eastern Union County	PO Box 242	Elizabeth	07201	(908) 518-9911	Union	
Family & Social Support Services	Domestic Violence & Child Abuse Services	VNA of Central Jersey Healthy Families - TIP	1301 Main Street	Asbury Park	07712	(732) 502-5157	Monmouth	
Family & Social Support Services	Domestic Violence & Child Abuse Services	VNA of Central Jersey Nurse Family Partnerships	200 Broadway	Long Branch	07740	(732) 502-5158	Monmouth	

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Family & Social Support Services	Domestic Violence & Child Abuse Services	Women Aware, Inc.	250 Livingston Ave.	New Brunswick	08901	(732) 249-4900	Middlesex	
Family & Social Support Services	Domestic Violence & Child Abuse Services	YMCA of Eastern Union County Project Protect	PO Box 242	Elizabeth	07201	(908) 355-1995	Union	
Family & Social Support Services	Domestic Violence & Child Abuse Services	YWCA of Eastern Union County Non-Residential Counseling	215 N Ave E	Cranford	07016	(908) 355 - 1500 Ext 10	Union	
Family & Social Support Services	Domestic Violence & Child Abuse Services	YWCA of Eastern Union County PALS-A Child's View	137 Elmer St	Westfield	07090	(908) 518 - 9911	Union	
Family & Social Support Services	Family & Parenting Services	Jewish Renaissance Family Success Center	242 Madison Avenue	Perth Amboy	08861	732-638-5063	Middlesex	RBMC PA
Family & Social Support Services	Family & Parenting Services	Arc of Union County Family Support	52 Fadem Rd	Springfield	07081	(973) 315 - 0000	Union	
Family & Social Support Services	Family & Parenting Services	Bayshore Family Success Center	810 Union Avenue	Union Beach	07735	(732) 497-3811	Monmouth	
Family & Social Support Services	Family & Parenting Services	Family Success Centers - Bayway Family Success Center	688 Maple Avenue	Elizabeth	07202	(908) 289-0136	Union	
Family & Social Support Services	Family & Parenting Services	Family Success Centers - Jefferson Park Ministries Family Success Center	213 Jefferson Avenue	Elizabeth	07201	(732) 249-4918	Union	
Family & Social Support Services	Family & Parenting Services	Family Success Centers - Plainfield Family Success Center Plainfield Public Schools	504 Madison Avenue	Plainfield	07060	(908) 731-4200, ext. 5242	Union	
Family & Social Support Services	Family & Parenting Services	Long Branch Concordance Family Success Center	300 Broadway	Long Branch	07740	(732) 571-1670	Monmouth	

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Family & Social Support Services	Family & Parenting Services	Make-A-Wish Foundation	1034 Salem Rd	Union	07083	(908) 964 - 5055	Union	
Family & Social Support Services	Family & Parenting Services	Mental Health Association in New Jersey Intensive Family Support Service	363 Monroe Ave	Kenilworth	07033	(908) 272 - 5309	Union	
Family & Social Support Services	Family & Parenting Services	New Brunswick Family Success Center at Puerto Rican Action Board	90 Jersey Avenue	New Brunswick	08903	(732) 828-2135	Middlesex	
Family & Social Support Services	Nursery & Childcare	Boys and Girls Club of Union County	934 Stuyvesant Ave 2nd Floor	Union	07083	(908) 687 - 7976	Union	
Family & Social Support Services	Nursery & Childcare	Union Economic Development Corp. Child Care Initiative	1085 Morris Ave Liberty Hall Center Suite 531	Union	07083	(908) 527 - 1166	Union	
Family & Social Support Services	Nursery & Childcare	Union Township Community Action Organization	2410 Springfield Ave	Vauxhall	07088	(908) 686 - 6150	Union	
Family & Social Support Services	Nursery & Childcare	Urban League of Union County Whitney M. Young Day Care Center	211 Bond St	Elizabeth	07206	(908) 352 - 3535	Union	
Family & Social Support Services	Nursery & Childcare	YMCA of Eastern Union County Child care	16-22 Jefferson Ave	Elizabeth	07201	(905)-355 - 3061	Union	
Family & Social Support Services	Nursery & Childcare	YMCA of Eastern Union County Child Care Five Points Branch	201 Tucker Ave	Union	07083	(908) 349 - 9622	Union	
Family & Social Support Services	Nursery & Childcare	YM-YWHA of Union County	501 Green Lane	Union	07083	(908) 289 - 8112	Union	
Family & Social Support Services	Other Counseling & Support Services	Advance Housing-Supportive Living Program	570 South Ave	Cranford	07016	(908) 376 - 6148	Union	

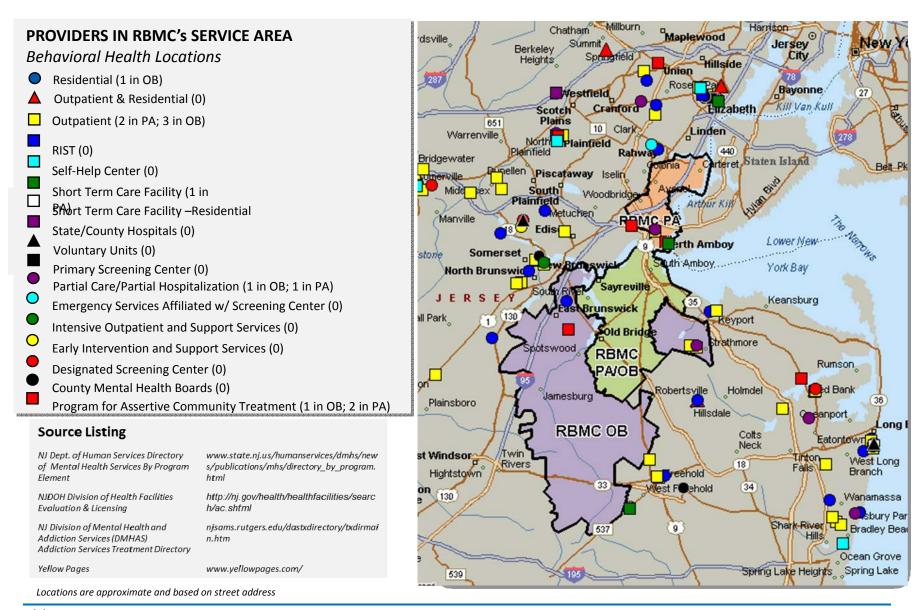
Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Family & Social Support Services	Other Counseling & Support Services	Make-A-Wish Foundation	1034 Salem Rd	Union	07083	(908) 964 - 5055	Union	
Family & Social Support Services	Other Counseling & Support Services	Union County Rape Crisis Center	300 N Ave E	Westfield	07090	(908) 518 - 0183	Union	
Family & Social Support Services	Other Counseling & Support Services	Urban League of Union County Housing and Community Development	288 N Broad St.	Elizabeth	07208	(908) 351 - 7200	Union	
Family & Social Support Services	Other Counseling & Support Services	YWCA of Eastern Union County Non-Residential Counseling	215 N Ave E	Cranford	07016	(908) 355 - 1500 Ext 10	Union	
Family & Social Support Services	Other Counseling & Support Services	YWCA of Eastern Union County PALS-A Child's View	137 Elmer St	Westfield	07090	(908) 518 - 9911	Union	
Family & Social Support Services	School Linked Services	NJ Child Assault Prevention Network CAP of Monmouth County Inc.	PO Box 241	Matawan	07747	(732) 566-3397	Monmouth	RBMC OB
Family & Social Support Services	School Linked Services	Perth Amboy High School	300 Eagle Avenue	Perh Amboy	08861	(732) 376-6030 ext. 23511	Middlesex	RBMC PA
Family & Social Support Services	School Linked Services	Robert N. Wilentz Elementary School	51 1st Street	Perth Amboy	08861	(732) 442-1081	Middlesex	RBMC PA
Family & Social Support Services	School Linked Services	Carteret High School	199 Washington Avenue	Carteret	07008	(732) 541-8960 ext. 4301	Middlesex	RBMC PA
Family & Social Support Services	School Linked Services	NJ Middlesex County CAP, Inc.	11 Ely Avenue	Laurence Harbor	08879	(732) 583-1120	Middlesex	RBMC PA/OB
Family & Social Support Services	School Linked Services	A.C. Chester Redshaw School	40 Van Dyke Avenue	New Brunswick	08901	(732) 745-5300 ext. 5488	Middlesex	
Family & Social Support Services	School Linked Services	Asbury Park High School	1003 Sunset Avenue	Asbury Park	07712	(732) 776-2638 ext. 2675	Monmouth	
Family & Social Support Services	School Linked Services	Lord Stirling Community School	101 Redmond Street	New Brunswick	08901	(732) 745-5300 ext. 6808	Middlesex	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Family & Social Support Services	School Linked Services	McKinley Community School	15 Van Dyke Avenue	New Brunswick	08901	(732) 745-5300 ext. 7067	Middlesex	
Family & Social Support Services	School Linked Services	Moss School	1 Simpson Place	Metuchen	08840	(732) 710-0324	Middlesex	
Family & Social Support Services	School Linked Services	New Brunswick High School	1000 Somerset Street	New Brunswick	08901	(732) 745-5300 ext. 5301	Middlesex	
Family & Social Support Services	School Linked Services	Plainfield High School	925 Arlington Avenue	Plainfield	07060	(908) 731-4360 ext. 5240	Union	
Family & Social Support Services	School Linked Services	South Brunswick High School	750 Ridge Road / PO Box 183	Monmouth Junction	08852	(732) 329-4044 ext. 3246	Middlesex	
Family & Social Support Services	School Linked Services	Abraham Clark High School	122 East 6th Avenue	Roselle	07203	(908) 298-2000 ext. 2221	Union	
Family & Social Support Services	School Linked Services	Bradley Elementary	110 Third Avenue	Asbury Park	07456	(732) 861-5969	Monmouth	
Family & Social Support Services	School Linked Services	Brayton Elementary School	89 Tulip Street	Summit	07901	(908) 273-4242	Union	
Family & Social Support Services	School Linked Services	Campbell Elementary School	Talmage Avenue	Metuchen	08840	(732) 710-0324	Middlesex	
Family & Social Support Services	School Linked Services	Child Care Resources of Monmouth County	3301 C. Route 66	Neptune	07753	(908) 918-9901 ext. 107	Monmouth	
Family & Social Support Services	School Linked Services	Crossroads North Middle School	635 Georges Road	Monmouth Junction	08852	(732) 329-4044 ext. 3246	Middlesex	
Family & Social Support Services	School Linked Services	Elizabeth High School (Thomas Jefferson House)	27 Martin Luther King Plaza	Elizabeth	07201	(908) 436-6771	Union	
Family & Social Support Services	School Linked Services	Elizabeth High School (William S. Halsey House)	600 Pearl Street	Elizabeth	07202	(908) 994-5383	Union	
Family & Social Support Services	School Linked Services	Elizabeth High School (William S. Halsey House)	600 Pearl Street	Elizabeth	07202	(908) 436-6644	Union	
Family & Social Support Services	School Linked Services	Emerson Elementary School	950 Park Avenue	Plainfield	07060	(908) 731-4360 ext. 5232	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Family & Social Support Services	School Linked Services	Freehold Learning Center	Dutch Lane	Freehold	07728	(732) 462-0464	Monmouth	
Family & Social Support Services	School Linked Services	Highland Park High/Middle School	102 North Fifth Avenue	Highland Park	08904	(732) 572-2400 ext. 3020	Middlesex	
Family & Social Support Services	School Linked Services	Hubbard Middle School	661 West Eighth Street	Plainfield	07060	(908) 731-4200 ext. 5623	Union	
Family & Social Support Services	School Linked Services	Jefferson Elementary School	950 Park Avenue	Plainfield	07061	(908) 731-4360 ext. 5233	Union	
Family & Social Support Services	School Linked Services	Jefferson School	110 Ashwood Avenue	Summit	07901	(908) 273-3807	Union	
Family & Social Support Services	School Linked Services	Joseph C. Caruso Elementary School	285 Carr Avenue	Keansburg	07734	(732) 787-2001 ext. 2550	Monmouth	
Family & Social Support Services	School Linked Services	Keansburg High School	140 Port Monmouth Road	Keansburg	07734	(732) 787-2007 ext. 2551	Monmouth	•
Family & Social Support Services	School Linked Services	Keansburg High School	140 Port Monmouth Road	Keansburg	07734	(732) 787-2007 ext. 2551	Monmouth	
Family & Social Support Services	School Linked Services	Keansburg High School	140 Port Monmouth Road	Keansburg	07734	(732) 787-2007 ext. 2001	Monmouth	
Family & Social Support Services	School Linked Services	Lincoln Hubbard Elementary School	52 Woodland Avenue	Summit	07901	(908) 273-4242	Union	
Family & Social Support Services	School Linked Services	Long Branch High School	404 Indiana Avenue	Long Branch	07740	(732) 728-9533	Monmouth	
Family & Social Support Services	School Linked Services	Long Branch High School	404 Indiana Avenue	Long Branch	07740	(732) 728-9533	Monmouth	
Family & Social Support Services	School Linked Services	Long Branch High School	127 Myrtle Avenue	Long Branch	07740	(732) 571-6288	Monmouth	
Family & Social Support Services	School Linked Services	Maxson Middle School	920 East Seventh Street	Plainfield	07602	(908) 731-4200 ext. 5397	Union	
Family & Social Support Services	School Linked Services	Neptune Middle School	2300 Heck Avenue	Neptune	07753	(732) 776-2200/2100	Monmouth	
Family & Social Support Services	School Linked Services	Network Community Coordinated Child Care	225 Long Avenue, Bldg. #15	Hillside	07205	(973) 923-1433 x 135	Union	

Map Group	Provider Type	Provider Name	Street Address	Town	ZIP Code	Phone	County	Service Area
Family & Social Support Services	School Linked Services	Parent Linking Program - Plainfield High School	925 Arlington Avenue	Plainfield	07060	(908) 731-4360 ext. 5152	Union	
Family & Social Support Services	School Linked Services	Plainfield High School	925 Arlington Avenue	Plainfield	07060	(908) 731-4360 ext. 5152	Union	
Family & Social Support Services	School Linked Services	Plainfield High School	925 Arlington Avenue	Plainfield	07060	(908) 731-4360 ext. 5152	Union	
Family & Social Support Services	School Linked Services	Port Monmouth Road School	1423 Port Monmouth Road	Keansburg	07734	(732) 787-2001	Monmouth	
Family & Social Support Services	School Linked Services	Red Bank Primary	222 River Street	Red Bank	07701	(732) 861-5988	Monmouth	
Family & Social Support Services	School Linked Services	Red Bank Regional High School	101 Ridge Road	Little Silver	07739	(732) 842-8000 ext. 1236	Monmouth	
Family & Social Support Services	School Linked Services	Washington Elementary School	507 Morris Avenue	Summit	07901	(908) 273-4242	Union	•

#### Clinical Care Provider Locations



3/9/2015

Communicable Disease Services

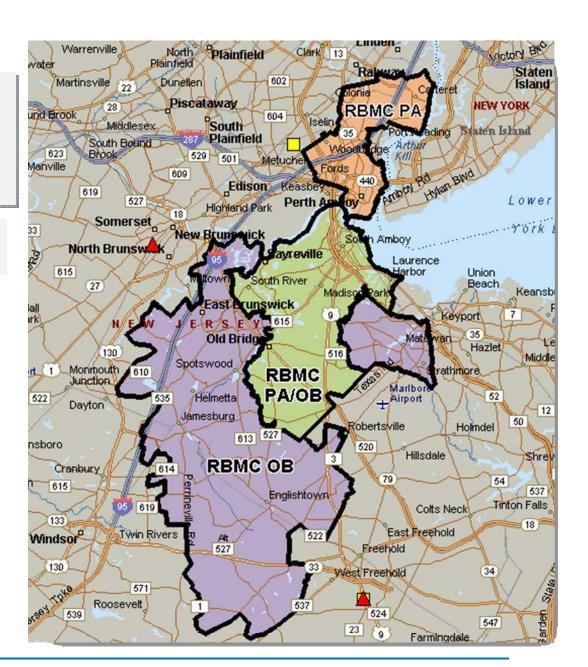
TB Center (0)

Immunizations (0)

## **Source Listing**

NJ Department of Health Office of Local Public Health http://www.state.nj.us/health/lh/directory/ lhdselectcounty.shtml

Locations are approximate and based on street address



Inpatient Rehabilitation & Long Term Care

▲ LTC / Nursing Home (0)

Hospital Based (0)

Long-Term Residential Health Care (2 in PA; 4 in PA/OB; 5 in OB)

#### **Source Listing**

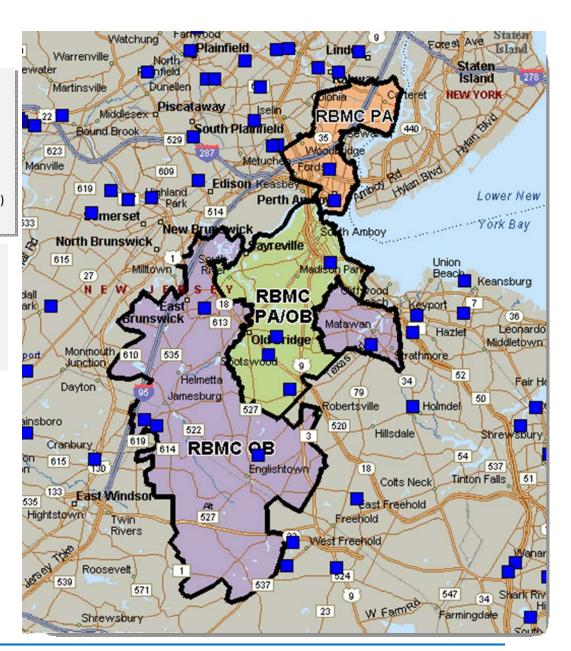
Health Care Payers Coalition of NJ

http://www.hcpc.org/HospCounty.asp

NJ Department of Health; Division of Health Facilities Evaluation and Licensing http://nj.gov/health/ems/documents/hospit al\_infomation.pdf

http://web.doh.state.nj.us/apps2/healthfaci lities/fsSetSearch.aspx?by=county

Locations are approximate and based on street address



## Maternal & Pediatric

▲ Pediatrics/Prenatal/Family Planning/Women's Health (3 in PA)

Pediatrics/Family Planning/Women's Health (0)

Pediatric/Prenatal/Women's Health (0)

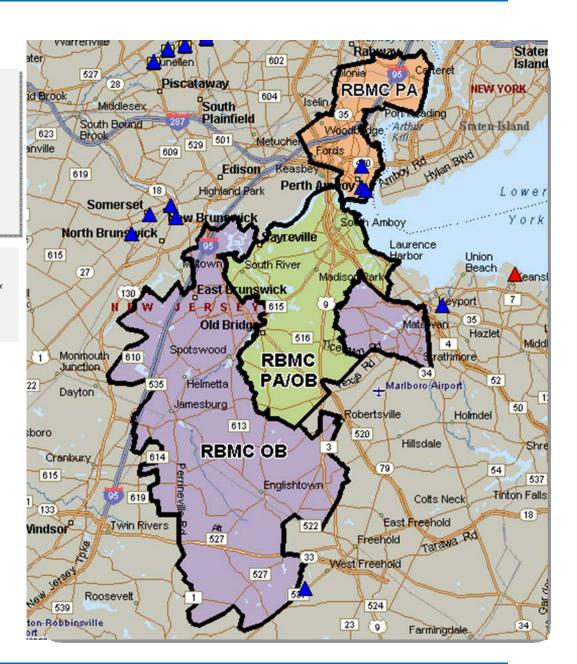
# **Source Listing**

NJ Primary Care Association http://www.njpca.org/fqhc/directory.aspx

Planned Parenthood http://www.plannedparenthoodnj.org/

Websites of each Community Health Center

Locations are approximate and based on street address



- 199 -

Senior Services

Social & Health (2 in OB; 3 in PA/OB; 2 in PA)

Medical - Adult Day Care (0)

# **Source Listing**

Seniors Resource Guide

NJ Department of Health: Division of Aging and Community Services

http://web.doh.state.nj.us/apps2/seniorcen ter/scsearch.aspx

NJ Department of Health:

http://web.doh.state.nj.us/apps2/healthfaci

Division of Health Facilities Evaluation

lities/fsSetSearch.aspx?by=county

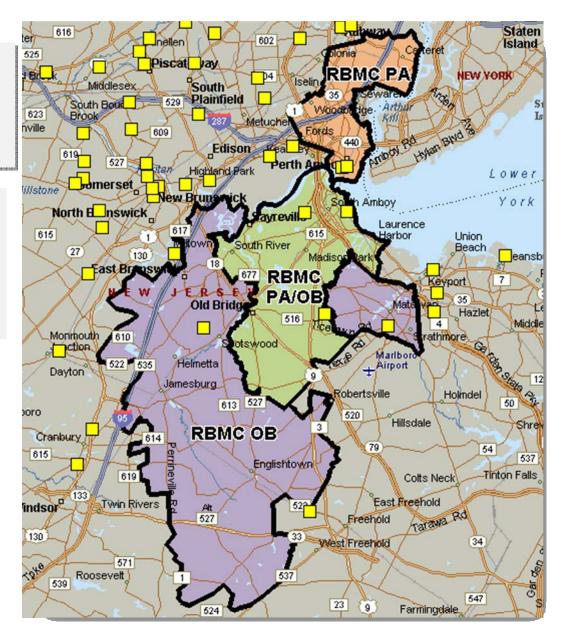
and Licensing

http://www.seniorsresourceguide.com/dire

ctories/Essex-Hudson-

Union/search.php?region=NJ03&topic=608

Locations are approximate and based on street address



Family & Social Support Services

School Linked Services (2 in PA; 1 in OB)

Family & Parenting Services (1 in PA)

Nursery & Child Care (0)

▲ Domestic Violence & Child Abuse Services (0)

Other Counseling & Support Services (0)

Locations are approximate and based on street address

# **Source Listing**

NJ-211 http://www.nj211.org/

DCF's Division of Prevention and Community Partnerships "Community Program Directory"

City of Newark Directory for Youth and Families

